

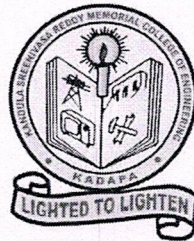
**KANDULA SRINIVASA REDDY MEMORIAL COLLEGE OF ENGINEERING
(AUTONOMOUS)**

KADAPA-516003. AP

(Approved by AICTE, Affiliated to JNTUA, Ananthapuramu, Accredited by NAAC)

(An ISO 9001-2008 Certified Institution)

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



VALUE ADDED COURSE

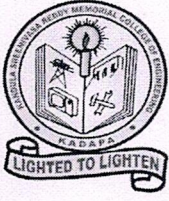
ON

“SHELL PROGRAMMING”

Resource Person : Mrs. V. Sudha, Assistant Professor, Dept. of CSE, KSRMCE

Course Coordinator: Mrs. B. Manorama Devi, Assistant Professor, Dept. of CSE, KSRMCE

Duration: 28/11/2022 to 04/01/2023



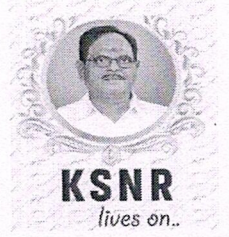
K.S.R.M. COLLEGE OF ENGINEERING

(UGC-AUTONOMOUS)

Kadapa, Andhra Pradesh, India- 516 003

Approved by AICTE, New Delhi & Affiliated to JNTUA, Ananthapuramu.

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Lr./KSRMCE/CSE/2022-23/

Date: 25-11-2022

To
The Principal,
KSRMCE,
Kadapa.

Respected Sir,

Sub: Permission to Conduct Value added Course on "SHELL PROGRAMMING"
28/11/2022 to 04/01/2023 – Req- Reg.

The Department of Computer Science and Engineering is planning to offer a Value Added Course on "SHELL PROGRAMMING" to B. Tech. students. The course will be conducted from 28/11/2022 to 04/01/2023. In this regard, I kindly request you to grant permission to conduct Value Added Course.

Thanking you sir,

B.D.
Yours faithfully

(B. Manorama Devi, Asst.Professor in CSE)

*Forwarded to the
principal sir,*

B.D.

*Permitted
U.S.S. MM/K
25/11/2022*



K.S.R.M. COLLEGE OF ENGINEERING (UGC-AUTONOMOUS)

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Cr./KSRMCE/CSE/2022-23/

Date: 26/11/2022

Circular

The Department of Computer Science and Engineering is offering a Value Added Course on "SHELL PROGRAMMING" from **28/11/2022 to 04/01/2023** to B.Tech students. In this regard, interested students are requested to register for the Value Added Course with following registration link.

<https://forms.gle/FjeoSjBAZDj238sa8>

For further information contact Course Coordinator.

Course Coordinator: Mrs. B. Manorama Devi, Asst.professor, Dept. of CSE.-KSRMCE.
Contact No: 9985725101

HOD

Dept. of CSE

Dr. V. LOKESWARA REDDY

M.Tech., Ph.D.,

Professor & HOD CSE

K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

Cc to:

IQAC-KSRMCE



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Registration form for Value Added Course on "SHELL PROGRAMMING" from 28/11/2022 to 04/01/2023

* Indicates required question

1. Name of the Student: *

2. Roll Number: *

3. Semester: *

Mark only one oval.

I Sem

II Sem

III Sem

IV Sem

V Sem

VI Sem

VII Sem

VIII Sem

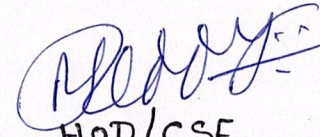
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11/29/2022 14:59:14	Anchalasnehalatha	209y1a0508	CSE	V Sem	7013073744	209y1a0508@ksrmce.ac.in
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11/25/2022 17:46:42	Avula Ashwith	209y1A0512	CSE	V Sem	7032231496	209y1A0512@ksrm.ac.in
11/28/2022 20:05:42	B.Bhavana	209y1a0518	CSE	V Sem	6300340558	209y1a0518@ksrmce.ac.in
11/28/2022 12:43:44	Bolli Neelima	209y1a0527	CSE	V Sem	7799118775	209y1a0527@ksrmce.ac.in
11/28/2022 12:34:25	B.Shanthi Lakshmi	209Y1A0530	CSE	V Sem	8309818680	209Y1A0530@ksrmce.ac.in
11/28/2022 12:37:30	C.Renu Sri	209Y1A0537	CSE	V Sem	7981809316	209y1a0537@ksrmce.ac.in
11/28/2022 12:37:44	C.praveena	209Y1A0540	CSE	V Sem	9392646379	209Y1A0540@ksrmce.ac.in
11/25/2022 18:33:01	C.Jagadeeswar Reddy	209Y1A0542	CSE	V Sem	9553584470	209y1a0542@ksrmce.ac.in
11/25/2022 20:30:47	G.Vamsee Krishna	209Y1A0555	CSE	V Sem	9642526950	Gvks.2003@gmail.com
11/28/2022 8:13:47	G Madhavi	209Y1A0557	CSE	V Sem	9704010541	209y1a0557@ksrmce.ac.in
11/28/2022 12:31:50	Gochi Yoga Lakshmi	209y1a0558	CSE	V Sem	7207375590	209y1a0558@ksrmce.ac.in
11/25/2022 16:13:26	GURRAMKONDA UMARI	209y1a0568	CSE	V Sem	8897574189	209y1a0568@ksrmce.ac.in
11/25/2022 15:55:24	Deekshitha	209y1a0569	CSE	V Sem	7207136582	209y1a0569@ksrmce.ac.in
11/30/2022 16:03:37	J.Anusha	209Y1A0571	CSE	V Sem	6301335261	209Y1A0571@gmail.com
11/28/2022 12:52:49	K.VARSHINI	209Y1A0577	CSE	V Sem	7075091876	209Y1A0577@ksrmce.ac.in
11/30/2022 17:24:43	Kuruba Akhila	209Y1A0587	CSE	V Sem	7989615061	209Y1A0587@ksrmce.ac.in
11/29/2022 17:10:53	Kuruba Ankitha	209Y1A0588	CSE	V Sem	6309924648	209Y1A0588@ksrmce.ac.in
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11/25/2022 20:31:09	Ravi Krishna	209y1a05g3	CSE	V Sem	+917995515142	209y1a05g3@ksrmce.ac.in
11/25/2022 19:43:16	SUNKARA MOHAMMED	209Y1A05G4	CSE	V Sem	9701381026	209Y1A05G4@ksrmce.ac.in
11/25/2022 17:31:27	Syed Ajas Basha	209y1a05g6	CSE	V Sem	9346393918	209y1a05g6@ksrmce.ac.in
11/26/2022 18:19:10	Verramreddy Myna	209y1a05H9	CSE	V Sem	7993915495	209y1a05h9@ksrmce.ac.in
11/25/2022 18:16:07	VELPUCHARLA VIGNES	209Y1A05I0	CSE	V Sem	6302268845	209y1a05i0@ksrmce.ac.in
11/25/2022 16:15:49	Yelugoti Jeshnavi	209y1a05i9	CSE	V Sem	6305872486	209y1a05i9@ksrmce.ac.in
11/29/2022 9:08:17	A suneetha	219Y1A0501	CSE	III Sem	9346808759	219Y1A0501@ksrmce.ac.in
11/27/2022 10:15:04	A.Bindusree	219y1a0504	CSE	III Sem	9392400502	219y1a0504@ksrmce.ac.in
11/26/2022 17:28:48	B.Sai Sahaja	219y1a0511	CSE	III Sem	8125256181	219y1a0511@ksrmce.ac.in
11/27/2022 11:16:05	Bonala Venkateswarlu	219Y1A0514	CSE	III Sem	9381801085	219y1a0514@ksrmce.ac.in
11/28/2022 15:35:17	B. Sree Harshitha	219Y1A0516	CSE	III Sem	8500470855	219Y1A0516@ksrmce.ac.in
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11/27/2022 16:48:41	Reena Dantham	219y1a0532	CSE	III Sem	7075033985	reenadantham@gmail.com
11/27/2022 9:56:58	DUDEKULA KANDUKUR	219y1a0541	CSE	III Sem	7569973553	219y1a0541@ksrmce.ac.in

Timestamp	Name of the Student:	Roll Number:	Branch:	Semester:	Mobile Number:	Email ID
11/27/2022 20:58:21	K.Madhavi	219Y1A0571	CSE	III Sem	9398158465	219y1a0571@ksrmce.ac.in
11/25/2022 19:56:02	KARIMALA REVANTH AC	219Y1A0576	CSE	III Sem	8897066570	219y1a0576@ksrmce.ac.in
11/26/2022 12:03:51	K.Hari krishna	219y1a0577	CSE	III Sem	6301696643	219y1a0577@ksrmce.ac.in
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11/25/2022 16:26:38	K.KARTHIKEYAN	219y1a0583	CSE	III Sem	9989780	kolimikarthikeyan22@gmail.com
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11/27/2022 20:59:18	M.Anusha	219Y1A0595	CSE	III Sem	8688163997	219y1a0595@ksrmce.ac.in
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11/27/2022 19:50:46	Kadiri sreeja	219Y1AO569	CSE	III Sem	9704095499	219Y1AO569@ksrmce.ac.in

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11/26/2022 17:17:07	PM PRAVEEN KUMAR	219Y1A05D7	CSE	III Sem	9010673414	219y1a05d7@ksrmce.ac.in
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11/29/2022 10:55:26	M pavithkra	219y1a098	CSE	III Sem	9346601098	219y1a098@ksrmce.ac.in

V. Sude
Resource Person(s)

30
coordinator(s)


HOD/CSE

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

SYLLABUS OF VALUE ADDED COURSE
COURSE NAME: SHLL PROGRAMMING

COURSE OVERVIEW:

This certificate course explains the fundamental ideas behind Open Source operating system approach to programming. Knowledge of Linux helps to understand operating system level programming. This course involves kernel concepts, basic commands and shell scripting.

COURSE OBJECTIVES:

1. To teach principles of operating system including file handling utilities, security by file permissions, disk utilities, process utilities, networking commands, filter commands.
2. To familiarize fundamentals of the shell, shell programming, pipes, input and output redirections, expressions, control structures, functions, loops, and debugging shell scripts.

COURSE OUTCOMES:

1. Ability to use various Linux Commands that are used to manipulate system operations.
2. Ability to write shell programming using Linux commands.
3. Ability to write shell scripts (shell programming) using functions, control statements and loops.

UNIT I:

Introduction to Linux Operating System: A brief history of Linux, architecture of Linux, Applications of Linux, survey of major distributions and system access.

UNIT II:

Linux Commands: Command syntax, who, whoami

Linux Directory Commands: pwd, mkdir, rmdir, ls, cd.

Linux File and File content Commands: touch, cat, rm, cp, mv, rename, head, tail, tac, more, and less.

Linux User Commands: su, id, usradd, passwd, groupadd.

UNIT III:

Linux Filter Commands: cat, cut, grep, comm, sed, tee, tr, uniq, wc, od, sort, gzip, gunzip.

Linux Utility Commands: find, locate, fate, cal, sleep, time, zcat, df, mount, exit, clear, link, unlink, alias, unalias.

Linux Network Commands: ip, ssh, mail, ping, host.

UNIT IV:

Basic shell concept, types of shells, the shell as programming language, shell scripting, vi/vm editor, setup executable permissions, example shell scripts using shell commands, shell variables, user defined shell variables, shell arithmetic, the read statement, control structures: if, nested if-else-fi, the case statement.

UNIT V:

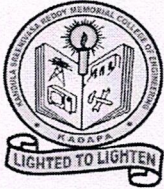
Functions, loops in shell scripts: for, while, until, break, continue, passing arguments to scripts, pipes.

TEXT BOOKS:

1. Beginning Linux Programming, 4th Edition, N. Matthew, R.Stones, Wrox, Wiley India Edition.
2. Shell Scripting, S.Parker, Wiley India Pvt. Ltd.
3. Unix and Shell Programming, B.A.Forouzan&R.F.Gilberg,Cengage Learning
4. Linux System Programming, Robert Love, O'Reily, SPD.

WEB REFERENCES:

1. www.advancedlinuxprogramming.com
2. www.tldp.org
3. www.gnu.org
4. www.kernel.org
5. www.linuxsecurity.com
6. <https://nptel.ac.in/courses/117/106/117106113/>



K.S.R.M. COLLEGE OF ENGINEERING

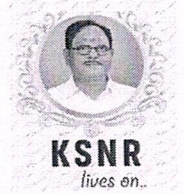
(UGC - AUTONOMOUS)

Kadapa, Andhra Pradesh, India - 516003

Approved by AICTE, New Delhi & Affiliated to JNTUA,

Ananthapuramu.

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SCHEDULE

Department of Computer Science and Engineering

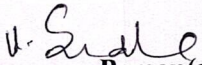
Value Added Course

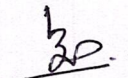
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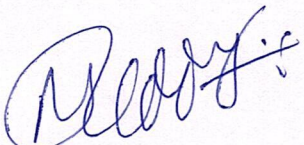
“Shell Programming” From 28/11/2022 to 04/01/2023

S.No	Date	Time	Faculty	Topic
1	28/11/2022	4 PM to 5PM	Smt. B. Manorama Devi Smt. V. Sudha	Inauguration
2	29/11/2022	4 PM to 5PM	Smt. B. Manorama Devi	Introduction to Linux Operating System
3	30/11/2022	4 PM to 5PM	Smt. V. Sudha	Basic Linux Commands
4	01/12/2022	4 PM to 5PM	Smt. V. Sudha	Practical's
5	02/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Linux directory commands
6	03/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
7	05/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Linux file commands and file content commands
8	06/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
9	07/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	File Content commands
10	08/12/2022	4 PM to 5PM	Dr. V. Lokeswara Reddy	Practical's
11	09/12/2022	4 PM to 5PM	Dr. V. Lokeswara Reddy	Linux user commands
12	12/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
13	13/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Linux filter commands
14	14/12/2022	4 PM to 5PM	Dr. V. Lokeswara Reddy	Practical's
15	15/12/2022	4 PM to 5PM	Dr. V. Lokeswara Reddy	Linux network commands
16	16/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
17	17/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Introduction to shell programming: basic shell concept, types of shells,
18	19/12/2022	4 PM to 5PM	Smt. V. Sudha	vi editor, setup execution permissions,
19	20/12/2022	4 PM to 5PM	Smt. V. Sudha	Example scripts, execute script
20	21/12/2022	4 PM to 5PM	Smt. V. Sudha	Practical's
21	22/12/2022	4 PM to 5PM	Smt. V. Sudha	Shell variables, user defined

				variables, read statement, shell arithmetic, expressions
22	23/12/2022	4 PM to 5PM	Smt. V.Sudha	Practical's
23	26/12/2022	4 PM to 5PM	Smt. V.Sudha	Control structures
24	27/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
25	28/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Case statement
26	29/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
27	30/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Functions
28	31/12/2022	4 PM to 5PM	Smt. B. Manorama Devi	Practical's
29	02/01/2023	4 PM to 5PM	Smt. B. Manorama Devi	Loops: for, while and until, break, continue
30	03/01/2023	4 PM to 5PM	Smt. B. Manorama Devi	Passing arguments to scripts, pipes
31	04/01/2023	4 PM to 5PM	Smt. B. Manorama Devi Smt. V. Sudha	Exam and certificate distribution


Resource Person(s)



Coordinator(s)

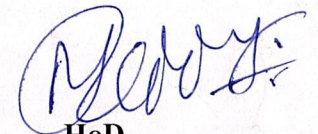

HoD/CSE

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

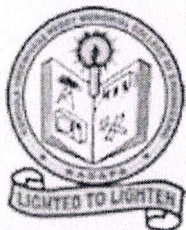
32	219Y1A0501	A Suneetha	Handwritten patterns
33	219Y1A0504	A. Bindusree	Handwritten patterns
34	219Y1A0511	B.Sai Sahaja	Handwritten patterns
35	219Y1A0514	Bonala Venkatesw arlu	Handwritten patterns
36	219Y1A0516	B. Sree Harshitha	Handwritten patterns
37	219Y1A0517	Byreddy Gowthami	Handwritten patterns
38	219Y1A0519	C. Padmaja	Handwritten patterns
39	219Y1A0520	C. Sathya Chakradhar	Handwritten patterns
40	219Y1A0523	C.Devendra Prasad	Handwritten patterns
41	219Y1A0532	Reena Dantham	Handwritten patterns
42	219Y1A0541	Dudekula Kandukuri Sai Balaji	Handwritten patterns
43	219Y1A0571	K. Madhavi	Handwritten patterns
44	219Y1A0576	Karimala Revanth Achari	Handwritten patterns
45	219Y1A0577	K. Hari Krishna	Handwritten patterns
46	219Y1A0578	K. Uma Maheshwar i	Handwritten patterns
47	219Y1A0581	K. Kusuma	Handwritten patterns
48	219Y1A0583	K. Karthike yan	Handwritten patterns
49	219Y1A0585	K.Pawan Kalyan	Handwritten patterns
50	219Y1A0591	K. Shaheen	Handwritten patterns
51	219Y1A0592	K.Siva Nandini	Handwritten patterns
52	219Y1A0593	K.Shiva Raju	Handwritten patterns

76	219Y1A0 SE5	R.Chandini	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	t	
77	219Y1A0 SE8	S.Sreevatsa va Reddy	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	si	
78	219Y1A0 5F3	Shaik Khadar Basha	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	
79	219Y1A0 5G5	S.Abhinay Kumar Reddy	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	
80	219Y1A0 5I1	V.Alekya	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	a	
81	219Y1A0 5J5	Y.Saisande eppeddy	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	
82	219Y1A0 569	Kadiri Sreeja	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	se	
83	219Y1A0 5D7	Pm Praveen Kumar	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	p	
84	229Y5A0 507	Guna Sekhar	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	g	
85	229Y5A0 513	Polisetty Kalyani	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k	k
86	229Y5A0 517	T.Shanmuk ha Sai	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa	sa
87	229Y5A0 519	V Tejaswani	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te	te


Coordinator(s)


HoD

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
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KADAPA - 516 005.



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PowerShell 7.0.0

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https://aka.ms/powershell

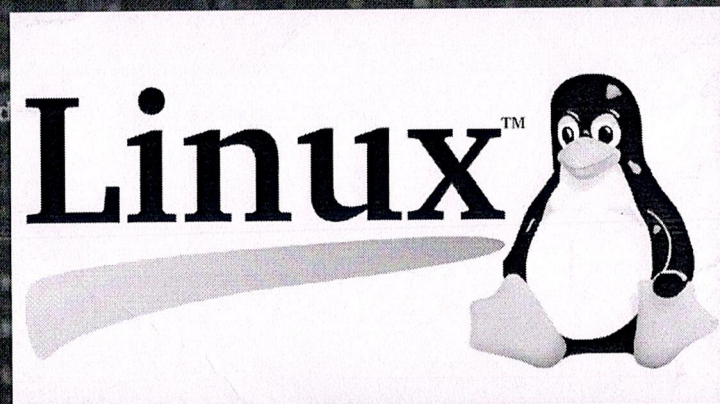
Type 'help' to get help.

[13:03:04] C:\Users\MikeLarah\
> Invoke-WebRequest "http://www.microsoft.com/technet/windows/whatsnew/whatsnew.aspx" -OutFile "C:\Users\MikeLarah\Downloads\whatsnew.html"

Value Added Course on Shell Programming

[13:03:08] C:\Users\MikeLarah\
>

**Venue : MB 209
(Machine Learning lab)**



**From 28/11/2022 to
04/01/2023**

Resource persons & Coordinators:

Smt. B. Manorama Devi, Assistant Professor,

Smt. V. Sudha, Assistant Professor

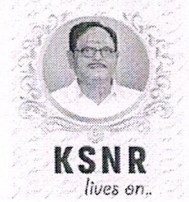


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Report of Value Added Course on “Shell Programming” From 28/11/2022 to 04/01/2023

Target Group	:	B.Tech Students
Details of Participants	:	87 Students
Co-coordinator(s)	:	Mrs. B. Manorama Devi
Resource Person(s)	:	Mrs. V. Sudha
Organizing Department	:	Computer Science and Engineering
Venue	:	MB209, Machine Learning Lab

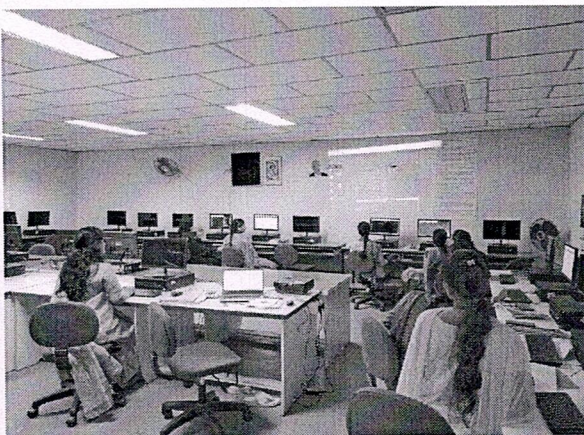
Description:

The Department of Computer Science and Engineering conducted a Value Added Course on “Shell Programming” from 28th November 2022 to 01st January 2023. The course Resource Persons is Mrs. V. Sudha, Assistant Professor in Department Computer Science and Engineering, KSRMCE.

The main objective of this course is to introduce the fundamental ideas behind Open Source operating system approach to programming. Knowledge of Linux helps to understand operating system level programming. This course involves kernel concepts, basic commands and shell scripting.

Photos

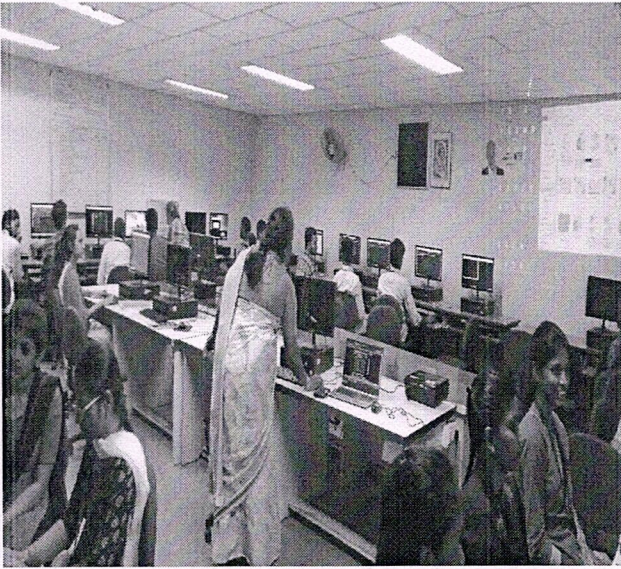
The pictures taken during the course are given below:



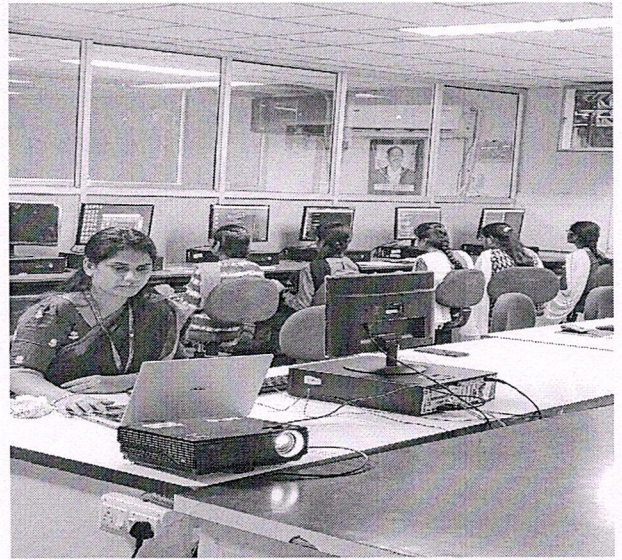
Resource Person Mrs. V. Sudha, Asst.Prof in CSE, giving Keynote Address



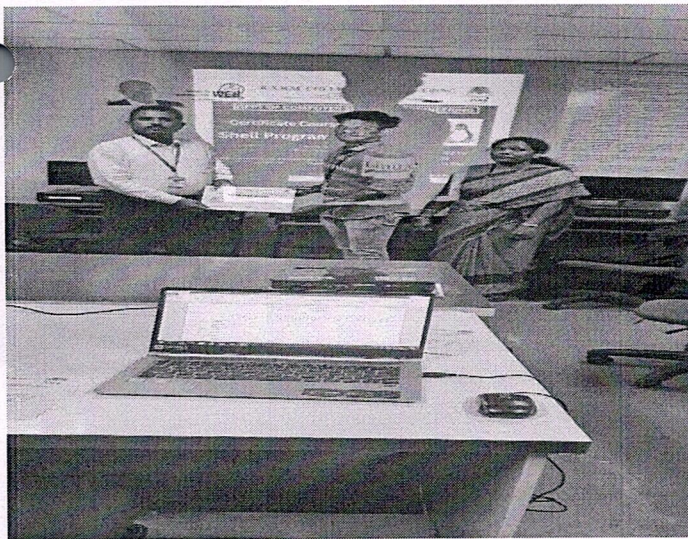
Coordinator Mrs. B. Manorama Devi, Asst.Prof in CSE, addressing the Gathering




Participants Keenly Listening the Lecture

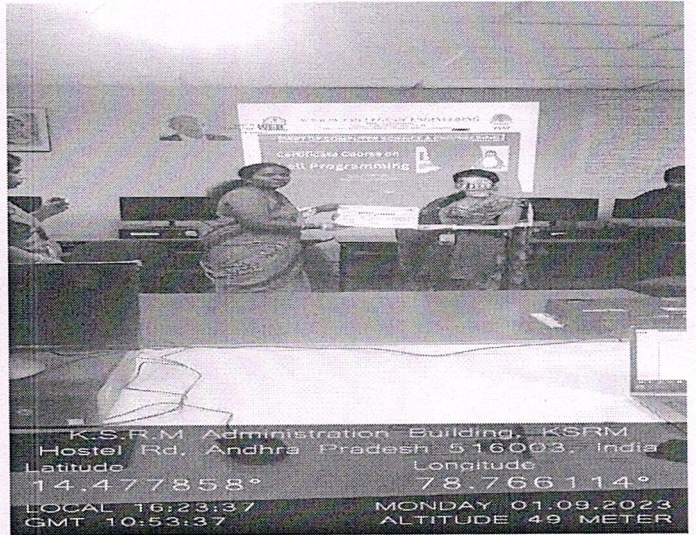


Participants Keenly Listening the Lecture

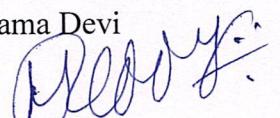


Certificates Distribution by the HoD Dr. V. Lokeswara Reddy


Coordinator(s)



Certificates Distribution by the Course Coordinator Mrs. B. Manorama Devi


HoD

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous),
KADAPA - 516 005.



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. A. Kusuma
bearing Roll Number. 209Y1A0504 participated in a
certification course on "**Shell Programming**" organized by
department of Computer Science and Engineering from
28-11-2022 to 04-01-2023.

COORDINATOR(S)

HOD

PRINCIPAL



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. A. Snehalatha
bearing Roll Number. 20941A0508 participated in a
certification course on "**Shell Programming**" organized by
department of Computer Science and Engineering from
28-11-2022 to 04-01-2023.

COORDINATOR(S)

HOD

PRINCIPAL

Feedback form on Value Added Course "SHELL PROGRAMMING" from 28/11/2022 to 04/01/2023

* Indicates required question

1. Roll Number *

2. Name of the Student: *

3. The objectives of the Value Added Course were met (Objective) *

Mark only one oval.

- Excellent
- Good
- Satisfactory
- Poor

4. The content of the course was organized and easy to follow (Delivery) *

Mark only one oval.

- Excellent
- Good
- Satisfactory
- Poor



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DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

CERTIFICATE OF PARTICIPATION

This is to certify that Mr/Miss. B. Neelima
bearing Roll Number. 209Y1A0527 participated in a
certification course on "**Shell Programming**" organized by
department of Computer Science and Engineering from
28-11-2022 to 04-01-2023.

COORDINATOR(S)

HOD

PRINCIPAL

5. The Resource Persons were well prepared and able to answer any question (Interaction) *

Mark only one oval.

- Excellent
 Good
 Satisfactory
 Poor

6. The exercises/role play were helpful and relevant (Syllabus Coverage) *

Mark only one oval.

- Excellent
 Good
 Satisfactory
 Poor

7. The Value Added Course satisfy my expectation as a value added Programme (Course Satisfaction) *

Mark only one oval.

- Excellent
 Good
 Satisfactory
 Poor

8. Any Issues
-

Value Added Course on "SHELL PROGRAMMING" from 28/11/2022 to 04/11/2023
Feedback Responses

Timestamp	Roll Number	Name of the Student:	The objectives of the Value	The content of the course	The Resource Persons w	The exercises/role play w	The Value Added Course	Any Issues
4/1/2023 11:07:26	209Y1A0504	A. Kusuma	Excellent	Excellent	Excellent	Excellent	Excellent	
4/1/2023 11:09:36	209y1a0510	A. Lavanya	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:11:46	209y1a0358	SIDDHAMSETTY MADH	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:13:56	209y1a0504	Alle kusuma	Good	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:16:06	209y1a0508	Anchalasnehalatha	Excellent	Good	Good	Excellent	Good	No
4/1/2023 11:18:16	209Y1A0510	Angadi Lavanya	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:20:26	209y1A0512	Avula Ashwith	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:22:36	209y1a0518	B.Bhavana	Good	Good	Excellent	Excellent	Excellent	No
4/1/2023 11:24:46	209y1a0527	Bolli Neelima	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:26:56	209Y1A0530	B.Shanthi Lakshmi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:29:06	209Y1A0537	C.Renu Sri	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:31:16	209Y1A0540	C.praveena	Good	Excellent	Good	Excellent	Good	No
4/1/2023 11:33:26	209Y1A0542	C.Jagadeeswar Reddy	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:35:36	209Y1A0555	G.Vamsee Krishna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:37:46	209Y1A0557	G Madhavi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:39:56	209y1a0558	Gochi Yoga Lakshmi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:42:06	209y1a0568	GURRAMKONDA UMARI	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:44:16	209y1a0569	Deekshitha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:46:26	209Y1A0571	J.Anusha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:48:36	209Y1A0577	K.VARSHINI	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:50:46	209Y1A0587	Kuruba Akhila	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:52:56	209Y1A0588	Kuruba Ankitha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:55:06	209Y1A0596	M.S. V. Avinash	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:57:16	209y1a05b0	N.Niroopa	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 11:59:26	209y1a05e1	R.Devendra	Good	Good	Excellent	Good	Excellent	No
4/1/2023 12:01:36	209y1a05g3	Ravi Krishna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:03:46	209Y1A05G4	SUNKARA MOHAMMED	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:05:56	209y1a05g6	Syed Ajas Basha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:08:06	209y1a05H9	Verramreddy Myna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:10:16	209Y1A05I0	VELPUCHARLA VIGNES	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:12:26	209y1a05i9	Yelugoti Jeshnavi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:14:36	219Y1A0501	A.suneetha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:16:46	219y1a0504	A.Bindusree	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:18:56	219y1a0511	B.Sai Sahaja	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:21:06	219Y1A0514	Bonala Venkateswarlu	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:23:16	219Y1A0516	B. Sree Harshitha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:25:26	219y1a0517	Byreddy Gowthami	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:27:36	219y1a0519	C. Padmaja	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:29:46	219y1a0520	C. Sathya Chakradhar	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:31:56	219y1a0523	C.Devendra Prasad	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:34:06	219y1a0532	Reena Dantham	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:36:16	219y1a0541	DUDEKULA KANDUKUR	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:38:26	219Y1A0571	K.Madhavi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:40:36	219Y1A0576	KARIMALA REVANTH AC	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:42:46	219y1a0577	K.Hari Krishna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:44:56	219y1a0578	K.Uma Maheshwari	Excellent	Excellent	Excellent	Excellent	Excellent	No

Timestamp	Roll Number	Name of the Student:	The objectives of the Valu	The content of the course	The Resource Persons w	The exercises/role play w	The Value Added Course	Any Issues
4/1/2023 12:47:06	219Y1A0581	K.Kusuma	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:49:16	219y1a0583	K.KARTHIKEYAN	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:51:26	219y1a0583	K.KARTHIKEYAN	Good	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:53:36	219y1a0591	K.shaheen	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 12:55:46	219y1a0591	K.shaheen	Excellent	Excellent	Excellent	Excellent	Good	No
4/1/2023 12:57:56	219Y1A0592	K.Siva nandini	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:00:06	219Y1A0595	M.Anusha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:02:16	219Y1A0596	M. Aparna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:04:26	219y1a0598	M pavithra	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:06:36	219y1a05a3	M Bharathi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:08:46	219Y1A05A4	M.lakshmi devi	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:10:56	219Y1A05A5	M.Sree Prasanna Durga	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:13:06	219y1a05a6	Manchuri vindhya	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:15:16	219y1a05a7	M.lakshmi bhavani	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:17:26	219y1a05a9	M.vinila	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:19:36	219y1a05b0	M.Hemalatha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:21:46	219y1a05b2	M.Bindhulatha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:23:56	219y1a05c1	N.venkata venu	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:26:06	219y1a05c1	N.venkata venu	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:28:16	219y1a05c2	N esther rani	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:30:26	219y1a05c4	N.Reddamma	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:32:36	219y1a05c6	PR Suprasanna	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:34:46	219y1a05c7	P. Rasool bee	Excellent	Excellent	Good	Excellent	Excellent	No
4/1/2023 13:36:56	219y1a05c8	Palagiri babjan	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:39:06	219y1a05c8	Palagiri babjan	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:41:16	219y1a05d0	Paradesi Harshitha	Excellent	Excellent	Excellent	Excellent	Good	No
4/1/2023 13:43:26	219y1a05d0	Paradesi Harshitha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:45:36	219y1a05d1	P. Somalatha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:47:46	219y1a05d6	P.Sainiveditha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:49:56	219y1a05e5	R.chandini	Good	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:52:06	219Y1A05E8	S.Sreevatsava Reddy	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:54:16	219y1a05f3	Shaik khadar basha	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 13:56:26	219y1a05g5	S.Abhinay Kumar Reddy	Excellent	Excellent	Excellent	Excellent	Excellent	No
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4/1/2023 14:00:46	219y1a05j5	Y.saisandeepreddy	Excellent	Excellent	Excellent	Excellent	Excellent	No
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4/1/2023 14:07:16	219y5a0502	Banda Thirumalesh	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 14:09:26	219Y5A0503	Bathala Raja Rajeswari	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 14:11:36	229y5a0507	Guna sekhar	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 14:13:46	229y5a0513	Polisetty kalyani	Excellent	Excellent	Good	Excellent	Good	No
4/1/2023 14:15:56	229Y5A0517	T.shanmukha sai	Excellent	Excellent	Excellent	Excellent	Excellent	No
4/1/2023 14:18:06	229Y5A0519	V tejaswani	Excellent	Excellent	Excellent	Excellent	Excellent	No

V. Sridee
Resource Person(s)

Coordinators(s)

Dr. V. LAKESWARA REDDY
HOD/CSE
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
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AWARD LIST

S.No	Roll Number	Name of the Student	Marks Obtained
1	209Y1A0558	S. Madhava	15
2	209Y1A0504	A. Kusuma	16
3	209Y1A0508	A. snehalatha	15
4	209Y1A0510	A. Lavanya	17
5	209Y1A0512	A. Ashwith	16
6	209Y1A0518	B. Bhavana	18
7	209Y1A0527	B. Neelima	19
8	209Y1A0530	B. Shanthi Lakshmi	20
9	209Y1A0537	C. Renu Sri	19
10	209Y1A0540	C. Praveena	19
11	209Y1A0542	C. Jagadeeswar Reddy	18
12	209Y1A0555	G. Vamsee Krishna	17
13	209Y1A0557	G. Madhavi	18
14	209Y1A0558	G. Yoga Lakshmi	16
15	209Y1A0568	G. Umarfarook	18
16	209Y1A0569	G. Deekshitha	19
17	209Y1A0571	J. Anusha	15
18	209Y1A0577	K. Varshini	17
19	209Y1A0587	K. Akhila	16
20	209Y1A0588	K. Ankitha	17
21	209Y1A0596	M.S. V. Avinash	18
22	209Y1A05B0	N. Niroopa	19
23	209Y1A05E1	R. Devendra	18
24	209Y1A05G3	Ravi Krishna	17
25	209Y1A05G4	Sunkara Mohammed Hussain	16
26	209Y1A05G6	Syed Ajas Basha	18
27	209Y1A05H9	Verramreddy Myna	19
28	209Y1A05I0	V. Vignesh Kumar Reddy	17
29	209Y1A05I9	Yelugoti Jeshnavi	18
30	219Y5A0502	Banda Thirumalesh	17
31	219Y5A0503	Bathala Raja Rajeswari	16
32	219Y1A0501	A. Suneetha	19
33	219Y1A0504	A. Bindusree	15
34	219Y1A0511	B. Sai Sahaja	17
35	219Y1A0514	Bonala Venkateswarlu	19
36	219Y1A0516	B. Sree Harshitha	18
37	219Y1A0517	Byreddy Gowthami	17
38	219Y1A0519	C. Padmaja	19
39	219Y1A0520	C. Sathya Chakradhar	18
40	219Y1A0523	C. Devendra Prasad	19
41	219Y1A0532	Reena Dantham	17
42	219Y1A0541	D. Kandukuri Sai Balaji	18
43	219Y1A0571	K. Madhavi	19

44	219Y1A0576	Karimala Revanth Achari	18
45	219Y1A0577	K.Hari Krishna	17
46	219Y1A0578	K.Uma Maheshwari	16
47	219Y1A0581	K.Kusuma	19
48	219Y1A0583	K.Karthikeyan	18
49	219Y1A0583	K.Karthikeyan	17
50	219Y1A0591	K.Shaheen	19
51	219Y1A0591	K.Shaheen	18
52	219Y1A0592	K.Siva Nandini	19
53	219Y1A0595	M.Anusha	17
54	219Y1A0596	M. Aparna	16
55	219Y1A0598	M Pavithra	18
56	219Y1A05A3	M Bharathi	17
57	219Y1A05A4	M.Lakshmi Devi	19
58	219Y1A05A5	M.Sree Prasanna Durga	16
59	219Y1A05A6	Manchuri Vindhya	18
60	219Y1A05A7	M.Lakshmi Bhavani	17
61	219Y1A05A9	M.Vinila	19
62	219Y1A05B0	M.Hemalatha	18
63	219Y1A05B2	M.Bindhulatha	16
64	219Y1A05C1	N.Venkata Venu	19
65	219Y1A05C1	N.Venkata Venu	17
66	219Y1A05C2	N Esther Rani	15
67	219Y1A05C4	N.Reddamma	18
68	219Y1A05C6	Pr Suprasanna	19
69	219Y1A05C7	P. Rasool Bee	20
70	219Y1A05C8	Palagiri Babjan	19
71	219Y1A05C8	Palagiri Babjan	19
72	219Y1A05D0	Paradesi Harshitha	20
73	219Y1A05D0	Paradesi Harshitha	17
74	219Y1A05D1	P. Somalatha	16
75	219Y1A05D6	P.Sainiveditha	19
76	219Y1A05E5	R.Chandini	15
77	219Y1A05E8	S.Sreevatsava Reddy	17
78	219Y1A05F3	Shaik Khadar Basha	18
79	219Y1A05G5	S.Abhinay Kumar Reddy	17
80	219Y1A05I1	V.Alekya	18
81	219Y1A05J5	Y.Saisandeepreddy	16
82	219Y1A0569	Kadiri Sreeja	15
83	219Y1A05D7	Pm Praveen Kumar	17
84	229Y5A0507	Guna Sekhar	
85	229Y5A0513	Polisetty Kalyani	17
86	229Y5A0517	T.Shanmukha Sai	18
87	229Y5A0519	V Tejaswani	16


Coordinator


HoD CSE

Dr. V. LOKESWARA REDDY
M.Tech., Ph.D.,
Professor & HOD CSE
K.S.R.M. College of Engineering (Autonomous)
KADAPA - 516 005.

K.S.R.M. COLLEGE OF ENGINEERING (AUTONOMOUS), KADAPA-516003
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ASSESSMENT TEST

Roll Number: _____ Name of the Student: _____

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries one mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? []
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? []
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? []
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? []
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. []
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? []
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? []
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? []
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. []
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? []
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program? []
X=3; y=3; z=10;
If [(%x -eq 3) -a (\$y -eq 5 -o \$z -eq 10)]
then
 echo \$x
else
 echo \$y
a) 1 b) 3 c) 5 d) error
12. What is the output of the following program? []
[-n \$HOME]
echo \$?
[-z \$HOME]
echo \$?
a) 0 1 b) 1 0 c) 0 0 d) 1 1
13. In Linux, which of the following command is used to create the filesystem? []
a) fchk b) fcsk c) daemon d) mkfs
14. The cp command uses []
a) standard output file
b) standard input file
b) both input and output file
d) neither standard input nor standard output file
15. Which of the following tool is used to automate Red Hat Linux installation? []
a) linux b) install c) kickstart d) setup
16. Which of the following tool is used to boot the Linux.Kernel from a DOS file systems? []
a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys
17. Which of the following command is used to count the total number of lines, words, and characters contained in a file? []
a) wc b) wcount c) countw d) none
18. Identify the hardware structure which is not supported by RedHat? []
a) IBM-Compatible b) Alpha c) SPARC d) Macintosh
19. Among the following commands which is used vi editors to delete a single character? []
a) a b) x c) y d) z
20. Choose the TCP/IP protocol which is used for remote terminal connection service? []
a) FTP b) UDP c) RARP d) TELNET

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ASSESSMENT TEST

Roll Number: 219Y1A0571 **Name of the Student:** K. Madhavi

Time: 20 Min (Objective Questions) **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [b] ✓
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [d] ✓
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? [d] ✓
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? [d] ✓
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. [d] ✓
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? [d] ✓
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? [a] ✓
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? [c] ✓
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. [d] ✓
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [a] X
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program?

[b] ✓

```
X=3; y=3; z=10;
If [ (%x -eq 3) -a ( $y -eq 5 -o $z -eq 10) ]
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

a) 1 b) 3 c) 5 d) error

12. What is the output of the following program?

[a] ✓

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

a) 0 1 b) 1 0 c) 0 0 d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [d] ✓

a) fchk b) fcsk c) daemon d) mkfs

14. The cp command uses

[d] ✓

a) standard output file

b) standard input file

b) both input and output file

d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [c] ✓

a) linux b) install c) kickstart d) setup

16. Which of the following tool is used to boot the Linux Kernel from a DOS file systems?

[d] ✓

a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file?

[a] ✓

a) wc b) wcount c) countw d) none

18. Identify the hardware structure which is not supported by RedHat? [d] ✓

a) IBM-Compatible b) Alpha c) SPARC d) Macintosh

19. Among the following commands which is used vi editors to delete a single character?

[a] ✓

a) a b) x c) y d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service?

[d] ✓

a) FTP b) UDP c) RARP d) TELNET

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ASSESSMENT TEST

Roll Number: 209Y1A058 Name of the Student: S. Madhava

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [C] X
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [D] ✓
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? [D] ✓
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? [C] X
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. [D] ✓
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? [D] ✓
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? [A] ✓
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? [C] ✓
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. [D] ✓
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [B] X
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program?
X=3; y=3; z=10;
If [(%x -eq 3) -a (\$y -eq 5 -o \$z -eq 10)]
then

[B] —

echo \$x

else

echo \$y

- a) 1 b) 3 c) 5 d) error

12. What is the output of the following program?

[B] X

[-n \$HOME]

echo \$?

[-z \$HOME]

echo \$?

- a) 0 1 b) 1 0 c) 0 0 d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [C] X

- a) fchk b) fcsk c) daemon d) mkfs

14. The cp command uses

[D] —

a) standard output file

b) standard input file

b) both input and output file

d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [C] X

- a) linux b) install c) kickstart d) setup

16. Which of the following tool is used to boot the Linux Kernel from a DOS file systems?

[D] —

- a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file?

[A] —

- a) wc b) wcount c) countw d) none

18. Identify the hardware structure which is not supported by RedHat? [D] —

- a) IBM-Compatible b) Alpha c) SPARC d) Macintosh

19. Among the following commands which is used vi editors to delete a single character?

[A] —

- a) a b) x c) y d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service?

[D] —

- a) FTP b) UDP c) RARP d) TELNET

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ASSESSMENT TEST

Roll Number: 2099/A0558 Name of the Student: G. Yoga Lakshmi

Time: 20 Min **(Objective Questions)** **Max.Marks:20**

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [a] ✓
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [d] ✓
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? [d] ✓
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? [c] ✓
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. [d] ✓
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? [d] ✓
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? [B] ✓
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? [c] ✓
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. [d] ✓
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [B] ✓
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program?

[b] ✓

```
X=3; y=3; z=10;
If [ (%x -eq 3) -a ( $y -eq 5 -o $z -eq 10) ]
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

a) 1 b) 3 c) 5 d) error

12. What is the output of the following program?

[a] ✓

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

a) 0 1 b) 1 0 c) 0 0 d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [d] ✓

a) fchk b) fcsk c) daemon d) mkfs

14. The cp command uses

[d] ✓

a) standard output file

b) standard input file

b) both input and output file

d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [c] ✓

a) linux b) install c) kickstart d) setup

16. Which of the following tool is used to boot the Linux.Kernel from a DOS file systems?

[d] ✓

a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file?

[a] ✓

a) wc b) wcount c) countw d) none

18. Identify the hardware structure which is not supported by RedHat? [d] ✓

a) IBM-Compatible b) Alpha c) SPARC d) Macintosh

19. Among the following commands which is used vi editors to delete a single character?

[a] ✓

a) a b) x c) y d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service?

[d] ✓

a) FTP b) UDP c) RARP d) TELNET

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20

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ASSESSMENT TEST

Roll Number: 219Y1A05C9 Name of the Student: N. Esther Rani

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [A] ✓
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [A] ✓
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? [D] ✓
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? [D] ✓
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. [D] ✓
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? [C] ✓
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? [A] ✓
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? [C] ✓
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. [D] ✓
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [B] ✓
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program?

[A] X

```
X=3; y=3; z=10;
If [ (%x -eq 3) -a ( $y -eq 5 -o $z -eq 10) ]
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

a) 1 b) 3 c) 5 d) error

12. What is the output of the following program?

[A] ✓

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

a) 0 1 b) 1 0 c) 0 0 d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [D] ✓

a) fchk b) fcsk c) daemon d) mkfs

14. The cp command uses

[D] ✓

a) standard output file

b) standard input file

b) both input and output file

d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [C] ✓

a) linux b) install c) kickstart d) setup

16. Which of the following tool is used to boot the Linux.Kernel from a DOS file systems?

[D] ✓

a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file? [A] ✓

a) wc b) wcount c) countw d) none

18. Identify the hardware structure which is not supported by RedHat? [D] ✓

a) IBM-Compatible b) Alpha c) SPARC d) Macintosh

19. Among the following commands which is used vi editors to delete a single character? [A] ✓

a) a b) x c) y d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service? [D] ✓

a) FTP b) UDP c) RARP d) TELNET

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ASSESSMENT TEST

Roll Number: 219Y1A0532 Name of the Student: D. REENA

Time: 20 Min

(Objective Questions)

Max.Marks:20

Note: Answer the following Questions and each question carries **one** mark.

1. Which of the following can be used to open a file for reading and making changes in shell programming? [b] ✓
a) r+ b) w+ c) r d) w
2. In Linux, which option of rm command is used to remove a directory with all its subdirectories? [e] ✗
a) -b b) -o c) -p d) -r
3. Which of the following directory contains device files? [d] ✓
a) Root b) bin c) etc d) dev
4. In Linux, how can you add a new user to your system? [d] ✓
a) useradd b) adduser c) linuxconf d) All of the above
5. _____ is a symbol used to represent special files in Linux OS. [d] ✗
a) d b) e c) s d) c
6. Which of the following in UNIX/LINUX remove files or directories? [d] ✓
a) Ls b) cd c) pwd d) rm
7. _____ searches the strings in file opened in vi editor? [a] ✓
a) / b) @ c) # d) \$
8. Which of the following 'wildcard' character matches exactly one character? [c] ✓
a) ! b) & c) ? d) *
9. In vi editor if keystroke 'I' is pressed in insert mode it will _____. [c] ✗
a) Inserts text to the left of the cursor
b) Inserts text at the beginning of the cursor
c) Inserts text to the right of the cursor
d) From the content of the file
10. How do you print the lines between 5 and 10, both inclusive? [a] ✓
a) cat filename|head|tail -6
b) cat filename|head|tail -5
c) cat filename |tail +5|head
d) cat filename |tail -5|head -10

11. What is the output of the following program?

[b] ✓

```
X=3; y=3; z=10;
If [ (%x -eq 3) -a ($y -eq 5 -o $z -eq 10) ]
then
```

```
    echo $x
```

```
else
```

```
    echo $y
```

- a) 1 b) 3 c) 5 d) error

12. What is the output of the following program?

[a] ✓

```
[ -n $HOME ]
```

```
echo $?
```

```
[ -z $HOME ]
```

```
echo $?
```

- a) 0 1 b) 1 0 c) 0 0 d) 1 1

13. In Linux, which of the following command is used to create the filesystem? [d] ✓

- a) fchk b) fcsk c) daemon d) mkfs

14. The cp command uses

[d] ✓

- a) standard output file
b) standard input file
c) both input and output file
d) neither standard input nor standard output file

15. Which of the following tool is used to automate Red Hat Linux installation? [c] ✓

- a) linux b) install c) kickstart d) setup

16. Which of the following tool is used to boot the Linux Kernel from a DOS file systems?

[d] ✓

- a) Config.sys b) Linux.bat c) SysLinux d) Linux.sys

17. Which of the following command is used to count the total number of lines, words, and characters contained in a file? [a] ✓

- a) wc b) wcount c) countw d) none

18. Identify the hardware structure which is not supported by RedHat? [d] ✓

- a) IBM-Compatible b) Alpha c) SPARC d) Macintosh

19. Among the following commands which is used vi editors to delete a single character? [a] ✓

- a) a b) x c) y d) z

20. Choose the TCP/IP protocol which is used for remote terminal connection service? [d] ✓

- a) FTP b) UDP c) RARP d) TELNET

Applications of Linux

As the Linux is the OS, it provides lot of applications. Some of them given below:

1) Text And Word Processing Applications
Star Office is Text and word application instead of WordPad and notepad.

2) Programming Language
There is a wide variety of Programming and scripting languages and tools available for Linux.

3) X-windows
X-windows is a highly flexible and configurable GUI environment that run on Linux as well as almost UNIX System.

Applications of Linux

4) Internet tool
It supports Netscape as well as Mosaic
It provides wide and full range of software needed to create internet server.
It also provide the complete network support to connect the internet.

5) Data bases
Today Oracle, Sybase and Informix all offer relational data base provides for Linux.

6) Dos and Windows Capabilities Software
Linux can be made to run DOS software with high degree of stability and compatibility.

Acquiring and using Linux

There are quite a few ways to obtain a Linux distribution.
1. One way is to go to the distributor's website and download the linux distribution of our choice.

For example,
If you want to download

- Mandrake, the go to <http://www.mandriva.com/>.
- SUSE Linux Enterprise Server 9,
go to http://www.novell.com/linux/download_linux.html.

Acquiring and using Linux

2. Other way is to obtain pre-burned copies of the Linux distribution we need from the distributor's website or from sites like cheapISO.com

- The price is of such distributions starts from less than Rs. 100/-
- Some new computers have Linux as preinstalled

Survey of Major Distributions

The major distributions of Linux include:

- Caldera
- Debian
- Mandrake
- Red Hat
- Slackware
- SuSE
- Turbolinux

- | | |
|-----------------|--|
| • Android | • Manjaro Linux |
| • Arch Linux | • MX Linux |
| • CentOS | • Puppy Linux |
| • Debian | • Slackware |
| • Elementary OS | • Solus |
| • Fedora | • Ubuntu and all its versions (Gnome, Kubuntu, Ubuntu mate, Xubuntu, and Lubuntu—just to name a few) |
| • Gentoo Linux | |
| • Kali Linux | • Zorin OS |
| • Linux Mint | |

Linux distributions.	Website/Logo
Red Hat Linux: http://www.redhat.com/	
SuSE Linux: http://www.suse.com/	
Mandrake Linux: http://www.mandrakesoft.com/	
Caldera Linux: http://www.calderasystems.com/	
Debian GNU/Linux: http://www.debian.org/	
Slackware Linux: http://www.slackware.com/	

https://en.wikipedia.org/wiki/List_of_Linux_distributions

System Access

➤ Logging In and using the Linux system

➤ Linux Commands

➤ Logging In and using Remote Linux system

Logging in and Using Linux System

Because the system can be used by many users some has to be given charge of administration of the system called 'system administrator' who will grant you the authority to use the system.

login: kumar

Password:*****

This will start up a desktop. The default desktop in Redhat Linux 9 is GNOME desktop.

If you want to turn off your computer, you must first shut down Linux. You can shut down your system in three ways:

1) By using halt command.

Main Menu

2) By using shutdown command.

Logout menu

#halt

This command will log you out and shut down the system.

•\$ halt

shutdown

shutdown 16:00	shut down at 16:00
shutdown -r now	shutdown immediately and reboot
shutdown -h now	shutdown immediately and halt

Linux also allow alt+ctrl+del

What is command in Linux?

The Linux command is a utility of the Linux operating system. All basic and advanced tasks can be done by executing commands. The commands are executed on the Linux terminal. The terminal is a command-line interface to interact with the system, which is similar to the command prompt in the Windows OS. *Commands in Linux are case-sensitive.*

Basic Commands

How to run commands

- Finder => Application => Utilitaires => Terminal
- When you log on Unix machine, you will see,

[someone]\$

- One command consists of three parts, i.e. command name, options, arguments.

Example)

[someone]\$ command-name optionA optionB argument1 argument2

Linux Directory Commands

1. pwd Command

The pwd command is used to display the location of the current working directory.

Syntax:

1.pwd

Output:

```
manor@LAPTOP-2S2C2733:~$ pwd
/home/manor
```

2. mkdir Command

The mkdir command is used to create a new directory under any directory.

Syntax:

mkdir <directory name>

Output:

```
manor@LAPTOP-2S2C2733:~$ mkdir ksrncse
mkdir: cannot create directory 'ksrncse': File exists
manor@LAPTOP-2S2C2733:~$ mkdir cse
manor@LAPTOP-2S2C2733:~$
```

3. rmdir Command

The rmdir command is used to delete a directory.

Syntax:

rmdir <directory name>

Output:

```
manor@LAPTOP-2S2C2733:~$ rmdir cse
manor@LAPTOP-2S2C2733:~$ cd cse
-bash: cd: cse: No such file or directory
manor@LAPTOP-2S2C2733:~$
```

4. ls Command

The ls command is used to display a list of content of a directory.

Syntax:

ls

Output:

```
manor@LAPTOP-2S2C2733:~$ ls
hello ksrncse new test
```

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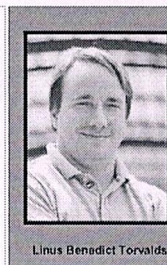
Importance of Linux Programming

- Linux provides many advantages over other operating systems: **Open-source software available for everyone to contribute, modify, and enhance the source code.** It is also available for users to download and use for free. Linux is less vulnerable and more secure than Windows operating systems.

A Brief History of Linux

1991 August

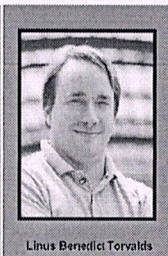
- Linux is introduced by Linus Torvalds, a student university of "Helsinki" in Finland.
- While the linux you know today was developed with assistance of programmer.
- Linus Torvalds still remain control of the evolving core of Linux O.S. :The Kernel



A Brief History of Linux

1992, March

- In March 1992 Version 1.0 of Kernel came into market, the first official release of Linux.
- At this point Linux RAM most of the common Unix tool from compiler to networking software to "X-Windows".



A Brief History of Linux

1991 September

Version 0.01 of Torvald's project is made available via ftp.funet.fi. Ari Lemmke, the systems administrator, gives the directory the name: *Linux*.

Linus had originally intended to call the new kernel "Freax".

According to Wikipedia, the name Linux was actually invented by Ari Lemmke who maintained the ftp.funet.fi FTP server from which the kernel was originally distributed.



A Brief History of Linux

October 1991

Richard Stallman expresses interest in having the Free Software Foundation distribute a GNU system with the Linux kernel.

December 1991

Robert Blum posts the first Linux FAQ.



January 1992

Minix creator Andrew Tannenbaum claims "Linux is obsolete" in a posting to comp.os.minix and starts a public discussion on the merits of Linux in which Linus Torvalds participates.

A Brief History of Linux

- First Linux "distribution", called *MCC Interim Linux* is released by the University of Manchester, England. (February 1992)
- Version 0.95 of the Linux kernel released. First version to be able to support X-Window. (March 1992)
- A Linux distribution called *Softlanding Linux System* (SLS) is released. (September 1992)
- Software und System Entwicklung GmbH* (SuSE) founded in Nuremberg, Germany. Distributes a German version of SLS with corresponding manuals. (November 1992)

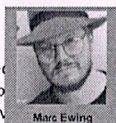
A Brief History of Linux

1993:

- Version 1.0 of *Slackware* released by Patrick Volkerding. It is based on the SLS distribution.
- Ian Murdock creates the *Debian* distribution.

1994:

- Linux kernel version 1.0 released.
- First issue of *Linux Journal* published.
- Linux distributor *Caldera* founded by Ray Noorda of Novell & Ransom Lov.
- Marc Ewing releases the first version of *Red Hat Linux*.



A Brief History of Linux

1995:

- Bob Young partners with Marc Ewing and forms *Red Hat Software*.
- Apache web server project started as a series of patches to the NCS HTTPd server (A Patchy server).

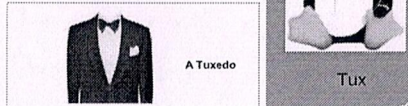
1996:

- Linux kernel version 2.0 released.



A Brief History of Linux

- Linus Torvalds suggests that a "slightly overweight penguin" would be the best mascot for Linux. He recommends Larry Ewing's "Tux" penguin images.



A Brief History of Linux

- The following filed a suit against William R. Della Croce, Jr. (September 1996)
 - Linus Torvalds
 - Linux Journal,
 - Yggdrasil Computing, Inc.,
 - Linux International
 - Work Group Solutions
 (Digital Equipment Corporation & Red Hat Software contributed to the cost of the legal process)
- to re-assign the Linux trademark to Linus Torvalds. The firm of Davis & Schroeder handled the case on an almost *pro-bono* basis. (Freer reduced charge for public good)
- Koal Desktop Environment* (KDE) project announced.

A Brief History of Linux

1997:

- The Linux trademark dispute between William Della Croce and Linus Torvalds is settled, with Della Croce re-assigning the trademark to Torvalds.
- Miguel de Icaza starts the *GNOME* project.

1998:

- Version 1.0 of the *K Desktop Environment* (KDE) released.

A Brief History of Linux

1999:

- Linux kernel version 2.2 released.
- GNOME 1.0 desktop released.

2000:

- Microsoft CEO Steve Ballmer calls Linux "a cancer that attaches itself in an intellectual property sense to everything it touches." in an interview with the Chicago Sun-Times.

A Brief History of Linux

2001:

- Linux kernel version 2.4 released.

2003:

- Linux kernel version 2.6 is released.
- Novell* acquires German Linux distributor *SuSE*.
- Red Hat announces that they will no longer sell boxed sets of their Linux distribution for retail customers. Instead, they will distribute Linux to end users via a development distribution called *Fedora Core*.

Why it is So Popular?

➤ Multi-user:

- Each user's shells, applications and commands are separate processes
- Number of simultaneous users limited only by:
 - CPU speed and available memory
 - Min. response times required by users/apps

➤ Multi-tasking:

- Many jobs can be under way at the same time
- Jobs truly *simultaneous* on multi-cpu

➤ Time-sharing:

- A single cpu is shared by all processes
- Processes exec briefly, passing cpu to others
- Process switches occur in milliseconds or less
- Kernel gives process a sense of total control

4. ls Command

The `ls` command is used to display a list of content of a directory.

Syntax:

```
ls
```

Output:

```
manor@LAPTOP-2S2C2733:~$ ls
hello  karmcse  new  test
```

```
manor@LAPTOP-2S2C2733:~/cse$ cat>demo.txt
This is my first demo file.
Welcome to all.^Z
[1]+  Stopped                  cat > demo.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo.txt
This is my first demo file.
manor@LAPTOP-2S2C2733:~/cse$
```

11. rename Command

The `rename` command is used to rename files. It is useful for renaming a large group of files.

Syntax:

rename 's/old-name/new-name/' files

For example, to convert all the text files into pdf files, execute the below command:

```
rename 's/\.txt$/\.pdf/' *.txt
```

Output:

5. cd Command

The `cd` command is used to change the current directory.

Syntax:

```
cd <directory name>
```

Output:

```
manor@LAPTOP-2S2C2733:~$ cd cse
manor@LAPTOP-2S2C2733:~/cse$
```

8. rm Command

The `rm` command is used to remove a file.

Syntax:

```
rm <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ rm demo1.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo1.txt
cat: demo1.txt: No such file or directory
manor@LAPTOP-2S2C2733:~/cse$
```

13. tail Command

The `tail` command is similar to the `head` command. The difference between both commands is that it displays the last ten lines of the file content. It is useful for reading the error message.

Syntax:

```
tail <file name>
```

Output:

Linux File commands:

6. touch Command

The `touch` command is used to create empty files. We can create multiple empty files by executing it once.

Syntax:

```
touch <file name>
```

```
touch <file1> <file2> ....
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ touch demo.txt demo1.txt demo2.txt
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt  demo1.txt  demo2.txt
manor@LAPTOP-2S2C2733:~/cse$
```

9. cp Command

The `cp` command is used to copy a file or directory.

Syntax:

```
To copy in the same directory:
```

```
cp <existing file name> <new file name>
```

```
To copy in a different directory:
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cp demo.txt demo1.txt
manor@LAPTOP-2S2C2733:~/cse$ cat demo1.txt
This is my first demo file.
manor@LAPTOP-2S2C2733:~/cse$
```

Linux File Content Commands:

12. head Command

The `head` command is used to display the content of a file. It displays the first 10 lines of a file.

Syntax:

```
head <file name>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cat text.txt
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
manor@LAPTOP-2S2C2733:~/cse$
```

7. cat Command

The `cat` command is a multi-purpose utility in the Linux system. It can be used to create a file, display content of the file, copy the content of one file to another file, and more.

Syntax:

```
cat [OPTION]... [FILE]..
```

To create a file, execute it as follows: `cat > <file name>`

// Enter file content

Press "CTRL+ D" keys to save the file. To display the content of the file, execute it as follows:

```
cat <file name>
```

Output:

10. mv Command

The `mv` command is used to move a file or a directory from one location to another location.

Syntax:

```
mv <file name> <directory path>
```

Output:

```
manor@LAPTOP-2S2C2733:~/cse$ cd ..
manor@LAPTOP-2S2C2733:~$ ls
cse  hello  karmcse  new  test
manor@LAPTOP-2S2C2733:~$ mv karmcse cse
manor@LAPTOP-2S2C2733:~$ cd cse
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt  demo1.txt  demo2.txt  karmcse
manor@LAPTOP-2S2C2733:~/cse$ mv karmcse karmcse1
manor@LAPTOP-2S2C2733:~/cse$ ls
demo.txt  demo1.txt  demo2.txt  karmcse1
manor@LAPTOP-2S2C2733:~/cse$
```

```
manor@LAPTOP-2S2C2733:~/cse$ head text.txt
1
2
3
4
5
6
7
8
9
10
manor@LAPTOP-2S2C2733:~/cse$
```

```
manor@LAPTOP-2S2C2733:~/cse$ head -5 text.txt
1
2
3
4
5
manor@LAPTOP-2S2C2733:~/cse$
```

```
manor@LAPTOP-2S2C2733:~/cse$ tail text.txt
10
11
12
13
14
15
16
17
18
19
manor@LAPTOP-2S2C2733:~/cse$ tail -3 text.txt
17
18
19
manor@LAPTOP-2S2C2733:~/cse$
```

14. tac Command

The `tac` command is the reverse of `cat` command, as its name specified. It displays the file content in reverse order (from the last line).

Syntax:

`tac <file name>`

Output:

```
marior@LAPTOP-252C2733:~$ tac text.txt
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
marior@LAPTOP-252C2733:~/cse$
```

16. less Command

The `less` command is similar to the `more` command. It also includes some extra features such as 'adjustment in width and height of the terminal.' Comparatively, the `more` command cuts the output in the width of the terminal.

Syntax:

`less <file name>`

Output:

Linux User Commands:

17. su Command

The `su` command provides administrative access to another user. In other words, it allows access of the Linux shell to another user.

Syntax:

`su <user name>`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ su javatpoint
Password:
javatpoint@javatpoint-Inspiron-3542:~$
```

20. passwd Command

The `passwd` command is used to create and change the password for a user.

Syntax:

`passwd <username>`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ sudo passwd JTP
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
```

23. cut Command

The `cut` command is used to select a specific column of a file. The `-d` option is used as a delimiter, and it can be a space (' '), a slash (/), a hyphen (-), or anything else. And, the `-f` option is used to specify a column number.

Syntax:

`Cut -d(delimiter)-f(columnNumber) <fileName>`

Output:

15. more command

The `more` command is quite similar to the `cat` command, as it is used to display the file content in the same way that the `cat` command does. The only difference between both commands is that, in case of larger files, the `more` command displays screenful output at a time.

In `more` command, the following keys are used to scroll the page:

ENTER key: To scroll down page by line.

Space bar: To move to the next page.

b key: To move to the previous page.

/ key: To search the string.

Syntax:

`more <file name>`

Output:

```
;; gyp.el - font-lock-mode support for gyp files.
;; Copyright (c) 2012 Google Inc. All rights reserved.
;; Use of this source code is governed by a BSD-style license that can be
;; found in the LICENSE file.
;; Put this somewhere in your load-path and
;; (require 'gyp)
(require 'python)
(require 'cl)
(defun (string-match "python-mode.el" (symbol-file 'python-mode 'defun))
  (error (concat "python-mode must be loaded from python.el (bundled with
                \"recent emacsen), not from the older and less maintained
                \"python-mode.el\"")))
(defadvice python-indent-calculate-levels (after gyp-outdent-closing-parens
                                           activate)
  "De-indent closing parens, braces, and brackets in gyp-mode.
  (when (and (eq major-mode 'gyp-mode)
             (string-match ".*" (buffer-substring-no-properties
                              (buffer-start)
                              (buffer-end))))))"
  (buffer-substring-no-properties
```

21. groupadd Command

The `groupadd` command is used to create a user group.

Syntax:

`groupadd <group name>`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ sudo groupadd Developer
javatpoint@javatpoint-Inspiron-3542:~$
```

```
javatpoint@javatpoint-Inspiron-3542:~$ cat ->marks.txt
alex-50
alen-70
jon-75
carry-85
celena-90
justin-80
javatpoint@javatpoint-Inspiron-3542:~$ cut -d- -f2 marks.txt
50
70
75
85
90
80
javatpoint@javatpoint-Inspiron-3542:~$
```

```
;; gyp.el - font-lock-mode support for gyp files.
;; Copyright (c) 2012 Google Inc. All rights reserved.
;; Use of this source code is governed by a BSD-style license that can be
;; found in the LICENSE file.
;; Put this somewhere in your load-path and
;; (require 'gyp)
(require 'python)
(require 'cl)
(defun (string-match "python-mode.el" (symbol-file 'python-mode 'defun))
  (error (concat "python-mode must be loaded from python.el (bundled with
                \"recent emacsen), not from the older and less maintained
                \"python-mode.el\"")))
(defadvice python-indent-calculate-levels (after gyp-outdent-closing-parens
                                           activate)
  "De-indent closing parens, braces, and brackets in gyp-mode.
  (when (and (eq major-mode 'gyp-mode)
             (string-match ".*" (buffer-substring-no-properties
                              (buffer-start)
                              (buffer-end))))))"
  (buffer-substring-no-properties
```

18. id Command

The `id` command is used to display the user ID (UID) and group ID (GID).

Syntax:

`id`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ id
uid=1000(javatpoint) gid=1000(javatpoint) groups=1000(javatpoint),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),115(lpadmin),120(sambashare)
javatpoint@javatpoint-Inspiron-3542:~$
```

19. useradd Command

The `useradd` command is used to add or remove a user on a Linux server.

Syntax:

`useradd username`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ sudo useradd JTP
[sudo] password for javatpoint:
javatpoint@javatpoint-Inspiron-3542:~$
```

Linux Filter Commands:

22. cat Command

The `cat` command is also used as a filter. To filter a file, it is used inside pipes.

Syntax:

`cat <fileName> | cat or tac | cat or tac |`

...

Output:

```
marior@LAPTOP-252C2733:~/cse$ cat demo1.txt
This is my first demo file.
marior@LAPTOP-252C2733:~/cse$ cat demo1.txt | tac | cat | tac
This is my first demo file.
marior@LAPTOP-252C2733:~/cse$ cat demo1.txt | tac
This is my first demo file.
marior@LAPTOP-252C2733:~/cse$ cat demo1.txt | tac | cat
This is my first demo file.
marior@LAPTOP-252C2733:~/cse$
```

Linux Filter Commands:

Filters are programs that take plain text (either stored in a file or produced by another program) as standard input, transforms it into a meaningful format, and then returns it as standard output.

24. grep Command

The `grep` is the most powerful and used filter in a Linux system. The 'grep' stands for "global regular expression print." It is useful for searching the content from a file. Generally, it is used with the pipe.

Syntax:

`command | grep <searchWord>`

Output:

```
manon@LAPTOP-252C2733:~/cse$ cat test1.txt
A distributed system is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. These devices split up the work, coordinating their efforts to complete the job more efficiently than if a single device had been responsible for the task.
manon@LAPTOP-252C2733:~/cse$ cat test1.txt | grep device
manon@LAPTOP-252C2733:~/cse$ cat test1.txt | grep device
A distributed system is a computing environment in which various components are spread across multiple computers (or other computing devices) on a network. These devices split up the work, coordinating their efforts to complete the job more efficiently than if a single device had been responsible for the task.
manon@LAPTOP-252C2733:~/cse$
```

25. comm Command

The `comm` command is used to compare two files or streams. By default, it displays three columns, first displays non-matching items of the first file, second indicates the non-matching item of the second file, and the third column displays the matching items of both files.

Syntax:

`comm <file1> <file2>`

Output:

```
manon@LAPTOP-252C2733:~/cse$ cat txt
Goodmorning to all
Shell programming
^Z
[5]+ Stopped cat > aaa.txt
manon@LAPTOP-252C2733:~/cse$ cat >bbb.txt
Goodmorning to all
shellprogramming
^Z
[6]+ Stopped cat > bbb.txt
manon@LAPTOP-252C2733:~/cse$
manon@LAPTOP-252C2733:~/cse$ comm aaa.txt bbb.txt
Goodmorning to all
Shell programming
shellprogramming
manon@LAPTOP-252C2733:~/cse$
```

27. tee command

The `tee` command is quite similar to the `cat` command. The only difference between both filters is that it puts standard input on standard output and also write them into a file.

Syntax:

`cat <fileName> | tee <newFile> | cat`

or `tac |`

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ echo class7 | sed 's/class/jtp/'
jtp7
javatpoint@javatpoint-Inspiron-3542:~$ echo class7 | sed 's/7/10/'
class10
```

```
javatpoint@javatpoint-Inspiron-3542:~$ cat marks.txt | tee new.txt | cat
alex-50
alen-70
jan-75
carry-85
celena-90
justin-80
javatpoint@javatpoint-Inspiron-3542:~$ cat new.txt
alex-50
alen-70
jan-75
carry-85
celena-90
justin-80
```

29. uniq Command

The `uniq` command is used to form a sorted list in which every word will occur only once.

Syntax:

`command <fileName> | uniq`

Output:

```
manon@LAPTOP-252C2733:~/cse$ cat >word.txt
zoo
pen
quit
apple
sun
bat
cat
app
egg
fan
pan
pen
bat
apple
egg
fan
egg
manon@LAPTOP-252C2733:~/cse$
[7]+ Stopped cat > word.txt
manon@LAPTOP-252C2733:~/cse$ sort word.txt | uniq
```

26. sed command

The `sed` command is also known as **stream editor**. It is used to edit files using a regular expression. It does not permanently edit files; instead, the edited content remains only on display. It does not affect the actual file.

Syntax:

`command | sed 's/<oldWord>/<newWord>/'`

Output:

28. tr Command

The `tr` command is used to translate the file content like from lower case to upper case.

Syntax:

`command | tr '<old>' '<new>'`

Output:

```
manon@LAPTOP-252C2733:~/cse$ cat test1.txt | tr 'a-z' 'A-Z'
A DISTRIBUTED SYSTEM IS A COMPUTING ENVIRONMENT IN WHICH VARIOUS COMPONENTS ARE SPREAD ACROSS MULTIPLE COMPUTERS (OR OTHER COMPUTING DEVICES) ON A NETWORK. THESE DEVICES SPLIT UP THE WORK, COORDINATING THEIR EFFORTS TO COMPLETE THE JOB MORE EFFICIENTLY THAN IF A SINGLE DEVICE HAD BEEN RESPONSIBLE FOR THE TASK.
manon@LAPTOP-252C2733:~/cse$
```

```
manon@LAPTOP-252C2733:~/cse$ sort word.txt | uniq
app
apple
bat
cat
dog
egg
fan
pen
quit
sun
zoo
manon@LAPTOP-252C2733:~/cse$
```

wc Command

The `wc` command is used to count the lines, words, and characters in a file.

Syntax:

`wc <file name>`

Output:

```
manon@LAPTOP-252C2733:~/cse$ wc test1.txt
  3  50 320 test1.txt
manon@LAPTOP-252C2733:~/cse$
```

31. od Command

The `od` command is used to display the content of a file in different s, such as hexadecimal, octal, and ASCII characters.

Syntax:

`od -b <fileName> // Octal format`

`od -t x1 <fileName> // Hexa decimal form`

`at`

`od -c <fileName> // ASCII character for`

`mat`

Output:

```
manon@LAPTOP-252C2733:~/cse$ od -b test1.txt
00000000 012 101 040 144 151 163 164 165 151 142 165 164 145 144 040 163
00000020 171 163 164 145 155 040 151 163 040 141 040 143 157 155 160 163
00000040 164 151 156 147 040 145 156 166 151 162 157 156 155 145 156 164
00000060 040 151 156 040 167 150 151 143 150 040 166 141 162 151 157 165
00000080 163 040 143 157 155 160 157 156 145 145 156 160 163 040 142 162 143
00000100 040 163 160 162 145 141 144 040 141 143 162 157 163 163 040 153
00000120 165 154 164 151 160 154 145 040 143 157 155 160 165 164 145 162
00000140 163 040 050 157 162 040 157 164 150 145 162 040 143 157 155 160
00000160 165 164 151 156 147 040 144 145 166 151 145 145 143 053 040 157
00000180 156 040 141 040 156 145 164 167 167 162 151 056 040 124 150 145
00000200 163 145 040 144 145 166 151 143 145 163 040 163 160 154 151 164
00000220 163 145 040 164 150 145 040 167 157 152 153 054 040 143 157
00000240 157 162 145 151 156 141 164 151 156 147 040 164 150 145 151 162
00000260 040 145 146 146 157 162 162 163 040 164 157 040 143 157 155 160
00000280 154 145 164 145 040 164 150 145 040 152 157 142 040 155 157 162
00000300 145 040 145 146 146 151 143 151 145 150 164 154 171 040 154 150
00000320 141 156 040 151 146 040 141 040 163 151 156 147 154 145 040 144
00000340 145 146 151 143 145 040 150 141 144 040 142 145 145 156 040 162
00000360 145 163 160 157 156 163 151 142 154 145 040 146 157 162 040 164
00000380 150 145 040 164 141 163 153 056 012 144 145 166 151 143 145 012
00000400
manon@LAPTOP-252C2733:~/cse$
```

```
manon@LAPTOP-252C2733:~/cse$ od -t x1 test1.txt
00000000 0a 41 20 64 69 73 74 72 69 62 75 74 65 64 20 73
00000020 79 73 74 65 64 20 69 73 20 61 20 63 6f 64 70 75
00000040 74 69 6e 67 20 65 6e 76 69 72 6f 6e 6d 65 64 74
00000060 20 69 6e 20 77 68 69 63 68 20 76 61 72 69 6f 75
00000080 73 20 63 6f 6d 70 6f 6e 65 6e 74 73 20 61 72 65
00000100 20 73 70 74 69 61 64 20 63 74 6f 73 73 20 6d
00000120 74 6e 74 69 70 6e 65 20 63 6f 6d 70 75 74 65 72
00000140 73 20 28 6f 72 20 6f 74 68 65 72 20 63 6f 6d 70
00000160 75 74 69 6e 67 20 64 65 76 69 63 65 73 29 20 6f
00000180 20 61 20 6e 65 74 77 6f 72 60 20 20 54 68 65
00000200 73 69 20 64 65 76 69 63 65 73 20 73 70 64 69 74
00000220 20 75 70 74 68 65 20 77 6f 72 6b 2c 20 63 6f
00000240 6f 72 64 69 6e 61 74 69 6e 67 20 74 68 65 69 72
00000260 20 65 66 66 6f 72 74 73 20 74 6f 20 63 6f 6d 70
00000280 6c 65 74 65 20 74 68 69 20 0a 6f 62 20 6d 6f 72
00000300 65 20 45 66 68 69 63 69 65 6e 74 6e 70 20 74 68
00000320 65 76 69 63 65 20 68 61 64 20 62 65 65 6e 20 72
00000340 65 73 70 6f 6e 73 69 62 6c 65 20 66 6f 72 20 74
00000360 68 65 20 74 61 73 6b 2e 0a 64 65 76 69 63 65 0a
00000380
manon@LAPTOP-252C2733:~/cse$
```

```
manon@LAPTOP-252C2733:~/cse$ cd ~ && ls -l test1.txt
-rw-r--r-- 1 manon manon 4096 Oct 27 22:35 test1.txt
manon@LAPTOP-252C2733:~/cse$ find . -name '*.*'
./aaa.txt
./bbb.txt
./demo.txt
./demo1.txt
./demo2.txt
./history.txt
./test1.txt
./text.txt
./word.txt
```

Linux Utility Commands:

35. find Command

The find command is used to find a particular file within a directory. It also supports various options to find a file such as by name, by type, by date, and more.

The following symbols are used after the find command:

- (.) : For current directory name
- (/) : For root

Syntax:

find . -name "*.pdf"

37. date Command

The date command is used to display date, time, time zone, and more.

Syntax:

date

Output:

```
manon@LAPTOP-252C2733:~/cse$ date
Thu Oct 7 22:35:50 IST 2021
manon@LAPTOP-252C2733:~/cse$
```

39. sleep Command

The sleep command is used to hold the terminal by the specified amount of time. By default, it takes time in seconds.

Syntax:

sleep <time>

Output:

```
manon@LAPTOP-252C2733:~/cse$ sleep 5
```

32. sort Command

The sort command is used to sort files in alphabetical order.

Syntax:

sort <file name>

Output:

```
manon@LAPTOP-252C2733:~/cse$ cat word.txt
word
manon@LAPTOP-252C2733:~/cse$ sort word.txt
word
manon@LAPTOP-252C2733:~/cse$
```

Output:

```
manon@LAPTOP-252C2733:~/cse$ find -name '*.txt'
./aaa.txt
./bbb.txt
./demo.txt
./demo1.txt
./demo2.txt
./history.txt
./test1.txt
./text.txt
./word.txt
manon@LAPTOP-252C2733:~/cse$
```

38. cal Command

The cal command is used to display the current month's calendar with the current date highlighted.

Syntax:

cal

Output:

```
manon@LAPTOP-252C2733:~/cse$ cal
October 2021
Su Mo Tu We Th Fr Sa
1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
manon@LAPTOP-252C2733:~/cse$
```

40. time Command

The time command is used to display the time to execute a command.

Syntax:

time

Output:

```
manon@LAPTOP-252C2733:~/cse$ time
real 0m0.000s
user 0m0.000s
sys 0m0.000s
manon@LAPTOP-252C2733:~/cse$ cat test1.txt
```

33. gzip Command

The gzip command is used to truncate the file size. It is a compressing tool. It replaces the original file by the compressed file having '.gz' extension.

Syntax:

gzip <file1> <file2> <file3>...

Output:

```
manon@LAPTOP-252C2733:~/cse$ gzip test1.txt
manon@LAPTOP-252C2733:~/cse$ ls
aaa.txt bbb.txt demo.txt demo1.txt demo2.txt history.txt is-manual test1.txt gz test1.txt word.txt
manon@LAPTOP-252C2733:~/cse$
```

36. locate Command

The locate command is used to search a file by file name. It is quite similar to find command; the difference is that it is a background process. It searches the file in the database, whereas the find command searches in the file system. It is faster than the find command. To find the file with the locates command, keep your database updated.

Syntax:

locate <file name>

```
manon@LAPTOP-252C2733:~/cse$ cal 2020
2020
January February March
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11
26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
April May June
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9
26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
July August September
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
10 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11
26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
October November December
Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa Su Mo Tu We Th Fr Sa
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26
10 20 21 22 23 24 25 26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11
26 27 28 29 30 31 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
```

34. gunzip Command

The gunzip command is used to decompress a file. It is a reverse operation of gzip command.

Syntax:

gunzip <file1> <file2> <file3>...

Output:

```
manon@LAPTOP-252C2733:~/cse$ gunzip test1.txt
manon@LAPTOP-252C2733:~/cse$ ls
aaa.txt bbb.txt demo.txt demo1.txt demo2.txt history.txt is-manual test1.txt gz test1.txt word.txt
manon@LAPTOP-252C2733:~/cse$
```

Output:

```
javatpoint@javatpoint-Inspiron-3542i-1:~$ locate sysctl.conf
/etc/sysctl.conf
/etc/sysctl.d/99-sysctl.conf
/etc/ufw/sysctl.conf
/snappy/core/8935/etc/sysctl.conf
/snappy/core/8935/etc/sysctl.d/99-sysctl.conf
/snappy/core/8966/etc/sysctl.conf
/snappy/core/8966/etc/sysctl.d/99-sysctl.conf
/snappy/core/18/1705/etc/sysctl.d/99-sysctl.conf
/snappy/core/18/1754/etc/sysctl.d/99-sysctl.conf
/usr/share/doc/procps/examples/sysctl.conf
/usr/share/man/man5/sysctl.conf.5.gz
```

41. zcat Command

The zcat command is used to display the compressed files.

Syntax:

zcat <file name>

Output:

```
manon@LAPTOP-252C2733:~/cse$ zcat test1.txt
word
manon@LAPTOP-252C2733:~/cse$
```

42. df Command

The **df** command is used to display the disk space used in the file system. It displays the output as in the number of used blocks, available blocks, and the mounted directory.

Syntax:

df

Output:

```
manor@LAPTOP-252C2733:~/cse$ df
Filesystem      1K-blocks    Used Available Use% Mounted on
rootfs          158158652 102676352 55474300   65% /
none            158158652 102676352 55474300   65% /dev
none            158158652 102676352 55474300   65% /run
none            158158652 102676352 55474300   65% /run/lock
none            158158652 102676352 55474300   65% /run/shm
none            158158652 102676352 55474300   65% /run/user
tmpfs           158158652 102676352 55474300   65% /sys/fs/cgroup
/dev/sda1       158158652 102676352 55474300   65% /mnt/c
nvme0n1         340767196  2978592 337888604   1% /mnt/d
manor@LAPTOP-252C2733:~/cse$
```

44. exit Command

Linux **exit** command is used to exit from the current shell. It takes a parameter as a number and exits the shell with a return of status number.

Syntax:

exit

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ exit
```

After pressing the ENTER key, it will exit the terminal.

```
manor@LAPTOP-252C2733: ~
manor@LAPTOP-252C2733:~$ logout
```

46. Link command:

A link creates a reference to a file or folder. Symbolic links are used in Linux for managing and collating files.

In command to create symbolic links

Syntax:

ln [-sf] [source] [destination]

- By default, the **ln** command creates a hard link.
- Use the **-s** option to create a soft (symbolic) link.
- The **-f** option will force the command to overwrite a file that already exists.
- **Source** is the file or directory being linked to.
- **Destination** is the location to save the link – if this is left blank, the symlink is stored in the current working directory.

```
manor@LAPTOP-252C2733:~/cse$ ls -l
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 aaa.txt
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 bbb.txt
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 demo.txt
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 hordlink.txt
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 history.txt
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 karmcel
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 test1.txt.gz
-rw-rw-r-- 1 manor manor 4096 Aug 22 11:53 word.txt
manor@LAPTOP-252C2733:~/cse$
```

<https://ostechnix.com/explaining-soft-link-and-hard-link-in-linux-with-examples/>

Hard Link :

A hard link acts as a copy (mirrored) of the selected file. It accesses the data available in the original file.

If the earlier selected file is deleted, the hard link to the file will still contain the data of that file.

Soft Link :

A soft link (also known as Symbolic link) acts as a pointer or a reference to the file name. It does not access the data available in the original file. If the earlier file is deleted, the soft link will be pointing to a file that does not exist anymore.

43. mount Command

The **mount** command is used to connect an external device file system to the system's file system.

Syntax:

mount -t type <device> <directory>

Output:

```
manor@LAPTOP-252C2733:~/cse$ mount
rootfs on / type xfs (rw,relatime)
none on /dev type tmpfs (rw,relatime,mode=755)
sysfs on /sys type sysfs (rw,relatime,mode=408)
proc on /proc type proc (rw,relatime,mode=408)
devpts on /dev/pts type devpts (rw,relatime,mode=600)
none on /run type tmpfs (rw,relatime,mode=755)
none on /run/lock type tmpfs (rw,relatime,mode=755)
none on /run/shm type tmpfs (rw,relatime,mode=755)
none on /run/user type tmpfs (rw,relatime,mode=755)
binfmt_misc on /proc/sys/binfmt_misc type binfmt_misc (rw,relatime)
tmpfs on /tmp type tmpfs (rw,relatime,mode=1777)
cgroup on /sys/fs/cgroup type cgroup (rw,relatime,mode=755)
blk on /mnt/c type drvfs (rw,relatime,uid=1000,gid=1000,css=fff)
blk on /mnt/d type drvfs (rw,relatime,uid=1000,gid=1000,css=fff)
manor@LAPTOP-252C2733:~/cse$
```

45. clear Command

Linux **clear** command is used to clear the terminal screen.

Syntax:

clear

Output:

```
manor@LAPTOP-252C2733:~/cse$ clear
manor@LAPTOP-252C2733:~/cse$ cat test1.txt
cat: test1.txt: No such file or directory
manor@LAPTOP-252C2733:~/cse$ cd cse
manor@LAPTOP-252C2733:~/cse$ cat demo.txt
welcome to KSRMCE
manor@LAPTOP-252C2733:~/cse$ cat demo1.txt
manor@LAPTOP-252C2733:~/cse$ clear
```

After pressing the ENTER key, it will clear the terminal screen.



```
manor@LAPTOP-252C2733:~/cse$ ln -s demo.txt symbolic-link
manor@LAPTOP-252C2733:~/cse$ ls
aaa.txt demo.txt demo2.txt karmcel test1.txt.gz word.txt
bbb.txt demo1.txt history.txt symbolic-link text.txt
manor@LAPTOP-252C2733:~/cse$
```

```
manor@LAPTOP-252C2733:~/cse$ ln demo.txt hordlink.txt
manor@LAPTOP-252C2733:~/cse$ ls
aaa.txt demo.txt demo2.txt hordlink.txt symbolic-link text.txt
bbb.txt demo1.txt history.txt karmcel test1.txt.gz word.txt
manor@LAPTOP-252C2733:~/cse$
```

<https://linuxize.com/post/how-to-create-symbolic-links-in-linux-using-the-ln-command/>

47. Removing Symlinks

To **delete/remove symbolic links** use either the **unlink** or **rm** command.

The syntax of the **unlink** is very simple: **unlink symlink_to_remove**

Removing a symbolic link using the **rm** command is the same as when removing a file:

rm symlink_to_removezz

48. Alias command:

alias command instructs the shell to replace one string with another string while executing the commands.

When we often have to use a single big command multiple times, in those cases, we create something called as **alias** for that command. **Alias** is like a shortcut command which will have same functionality as if we are writing the whole command.

```
manor@LAPTOP-252C2733:~/cse$ cat hordlink.txt
welcome to KSRMCE
manor@LAPTOP-252C2733:~/cse$ cat symbolic-link
welcome to KSRMCE
manor@LAPTOP-252C2733:~/cse$ cat demo.txt
welcome to KSRMCE
manor@LAPTOP-252C2733:~/cse$ rm demo.txt
manor@LAPTOP-252C2733:~/cse$ cat demo.txt
cat: demo.txt: No such file or directory
manor@LAPTOP-252C2733:~/cse$ cat hordlink.txt
welcome to KSRMCE
manor@LAPTOP-252C2733:~/cse$
```

Syntax:
alias [-p] [name[=value] ...]

alias name="value"

```
manon@LAPTOP-2S2C2733:~/cse$ alias cls='clear'
```

```
manon@LAPTOP-2S2C2733:~/cse$ alias -> cls='clear'
alias alias='alias -p && alias -> { [! = & ] M echo terminal || echo error' ;history|tail -n100 <'
alias clear='cls'
alias cls='clear'
alias cpa='cp -r -colorauto'
alias gpa='grep -colorauto'
alias gpp='grep -colorauto'
alias ls='ls -l'
alias ll='ls -la'
alias llh='ls -lah'
alias llta='ls -la -colorauto'
alias llth='ls -lah -colorauto'
```

49. Creating an Unalias: Removing an existing alias is known as unaliasing.

Syntax:
unalias [alias name]

```
manon@LAPTOP-2S2C2733:~/cse$ unalias cls
manon@LAPTOP-2S2C2733:~/cse$ alias -p
alias alias='alias -p && alias -> { [! = & ] M echo terminal || echo error' ;history|tail -n100 <'
alias clear='cls'
alias cls='clear'
alias cpa='cp -r -colorauto'
alias gpa='grep -colorauto'
alias gpp='grep -colorauto'
alias ls='ls -l'
alias ll='ls -la'
alias llh='ls -lah'
alias llta='ls -la -colorauto'
alias llth='ls -lah -colorauto'
```

52. mail Command

The mail command is used to send emails from the command line.

Syntax:
mail -s "Subject" <recipient address>

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ mail -s "Hello World" hibanshyobey481@gmail.com
cc:
Hello There
Hope you are doing well.
```

51. ssh Command

Linux ssh command is used to create a remote connection through the ssh protocol.

Syntax:
ssh user_name@host(IP/Domain_name)</p>

56. Who Command:

The who command gives the information about the users logged on to the system.

Syntax:
who

```
@ ssh hibanshyobey481@gmail.com:
ssst@javatpoint:~$ who
ssst  tty1      2016-06-30 09:26
ssst  pts/0     2016-06-30 12:07 (10)
```

55. Whoami command:

It tells you about the system's username.

Syntax:
whoami

```
manon@LAPTOP-2S2C2733:~/cse$ whoami
manon
manon@LAPTOP-2S2C2733:~/cse$
```

Linux Networking Command

50. ip Command

Linux ip command is an updated version of the ipconfig command. It is used to assign an IP address, initialize an interface, disable an interface.

Syntax:
ip a or ip addr

```
manon@LAPTOP-2S2C2733:~/cse$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> 8:00:00:00:00:00 brd 0:0:0:0:0:0 scope local loopback-lan-iface
    link/loopback 8:00:00:00:00:00
    inet 127.0.0.1 brd 127.0.0.1 scope local host-lan-iface
        inet6 ::1 brd ::1 scope local host-lan-iface
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> 8:00:00:00:00:00 brd 0:0:0:0:0:0 scope global ether-lan-iface
    link/ether 8:00:00:00:00:00 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.100 brd 192.168.1.255 scope global host-lan-iface
        inet6 fe80::208:1:5053::1 scope link host-lan-iface
3: eth1: <BROADCAST,MULTICAST,UP,LOWER_UP> 8:00:00:00:00:00 brd 0:0:0:0:0:0 scope global ether-lan-iface
    link/ether 8:00:00:00:00:00 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.101 brd 192.168.1.255 scope global host-lan-iface
        inet6 fe80::208:1:5053::2 scope link host-lan-iface
4: eth2: <BROADCAST,MULTICAST,UP,LOWER_UP> 8:00:00:00:00:00 brd 0:0:0:0:0:0 scope global ether-lan-iface
    link/ether 8:00:00:00:00:00 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.102 brd 192.168.1.255 scope global host-lan-iface
        inet6 fe80::208:1:5053::3 scope link host-lan-iface
```

53. ping Command

The ping command is used to check the connectivity between two nodes, that is whether the server is connected. It is a short form of "Packet Internet Groper."

Syntax:
ping <destination>

Output:

```
javatpoint@javatpoint-Inspiron-3542:~$ ping javatpoint.com
PING javatpoint.com (194.169.80.123) 56(84) bytes of data:
64 bytes from www.javatpoint.com (194.169.80.123): icmp_seq=1 ttl=60 time=304 ms
64 bytes from www.javatpoint.com (194.169.80.123): icmp_seq=2 ttl=60 time=213 ms
64 bytes from www.javatpoint.com (194.169.80.123): icmp_seq=3 ttl=60 time=212 ms
64 bytes from www.javatpoint.com (194.169.80.123): icmp_seq=4 ttl=60 time=212 ms
```

54. host Command

The host command is used to display the IP address for a given domain name and vice versa. It performs the DNS lookups for the DNS Query.

Syntax:
host <domain name> or <ip address>

```
manon@LAPTOP-2S2C2733:~/cse$ host www.karmce.ac.in
www.karmce.ac.in is an alias for karmce.ac.in.
karmce.ac.in has address 251.106.1.238
karmce.ac.in mail is handled by 10 alt3.aspmx.l.google.com.
karmce.ac.in mail is handled by 5 alt1.aspmx.l.google.com.
karmce.ac.in mail is handled by 5 aspmx.l.google.com.
karmce.ac.in mail is handled by 10 alt4.aspmx.l.google.com.
karmce.ac.in mail is handled by 5 alt2.aspmx.l.google.com.
karmce.ac.in mail is handled by 99 karmce.ac.in.
```