**Experiment No.: 3**

**Aim :** Familiarizing of Linux command

**CO2:**

Perform system administration task.

**Procedure**

1. **pwd** -: Displays the full path name of your current directory.

**Output**



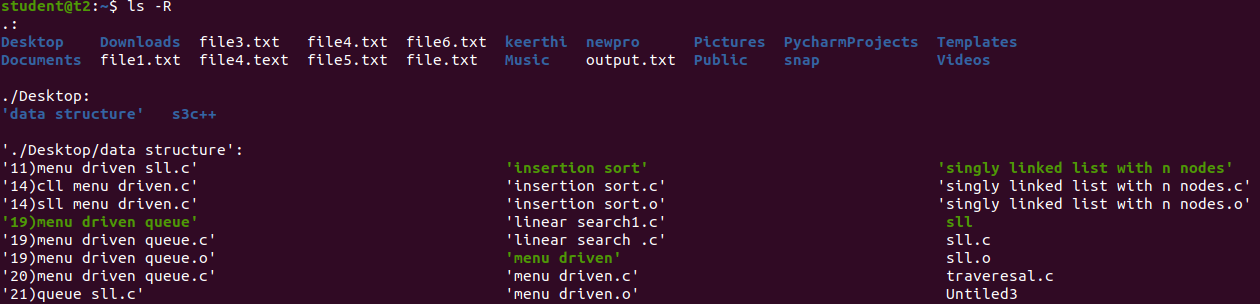
1. **ls -:** To list files and contents.
2. **ls-R -:** It will display the content of the sub-directories also.
3. **ls-l -:** It will show the list in a long list format.
4. **ls-al -:** Detailed information about files and directory.
5. **ls-a -:** The (ls -a) command will enlist the whole list of the current directory including the hidden files.
6. **ls-t -:** Sort by time and date.

**Output**

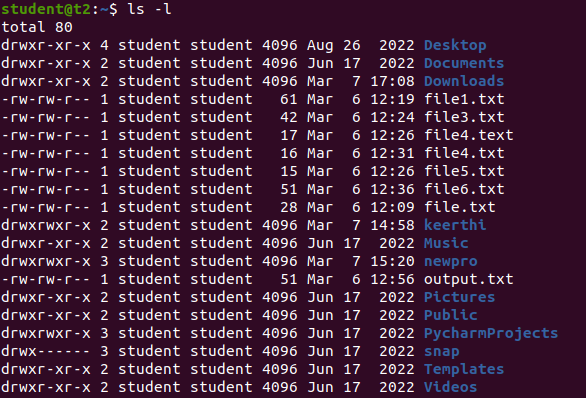
**2.**



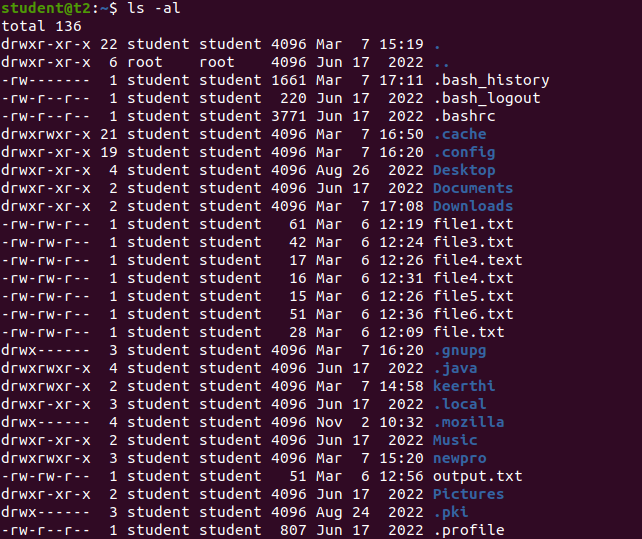
**a.**



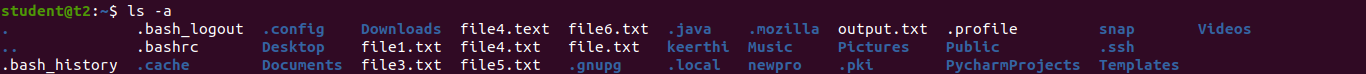
**b.**



**c.**



**d.**

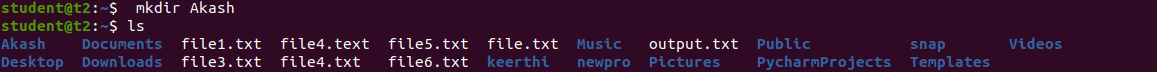


**e.**



1. **mkdir -: mkdir** command in Linux allows the user to create directories

**Output**



1. **cd -:** Linux **cd** command is used to change the current working directory.

**Output**



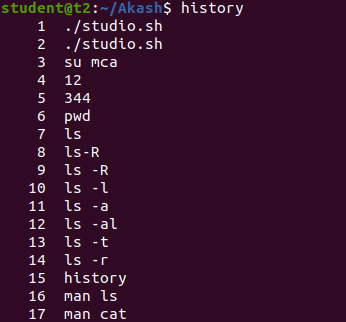
1. **cd -- -:**To move to the previous directory.

**Output**



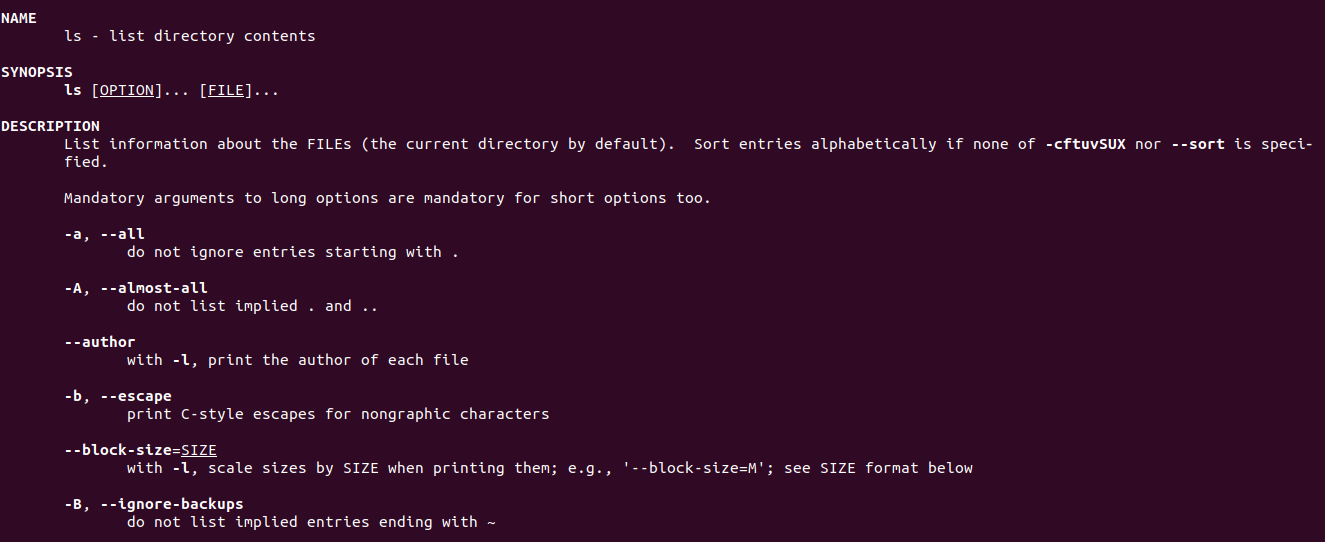
1. **history -:** To view the previously executed commands.

**Output**



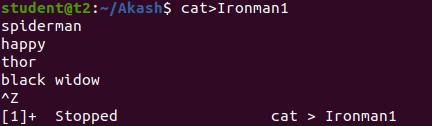
1. **man -:** man command in Linux is used to display the user manual of any command that we can run on the terminal.

**Output**



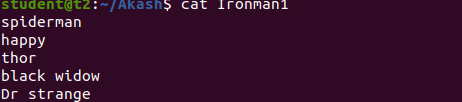
1. **cat>filename -:** Used to create a new file.

**Output**



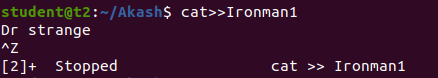
1. **cat -:** Used to display the content of file.

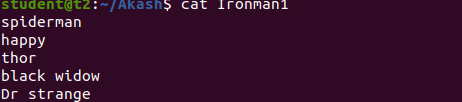
**Output**



1. **cat>>filename -:**to append the content of file.

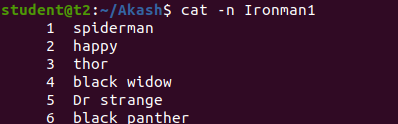
**Output**





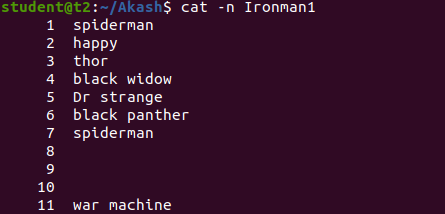
1. **cat -n filename** -: display the line number.

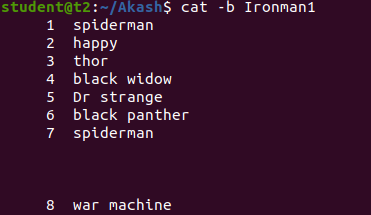
**Output**



1. **cat -b -:** to remove the empty line.

**Output**





**Result**

The program was executed and the result was successfully obtained. Thus CO2 was obtained.

**Experiment no:4                                                                                       Date:10-03-2023**

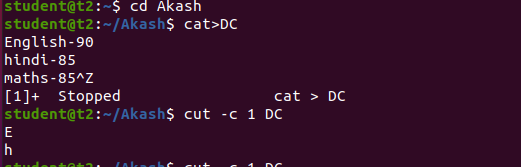
**Aim:** Familiarization with Linux command.

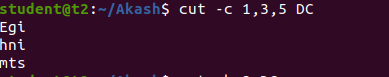
**CO2:** Perform system administration tasks.

1. i. cut -c[filename]: To cut by character,for cutting out sections from each line of file and writting the result to standard output.

$ cut -c 1,3,5 DC

Output:

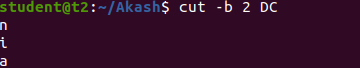




    ii. cut -b :To cut by byte position

$ cut -b 2 DC

Output:

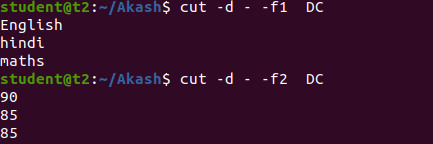


    iii. cut -d : To cut by delimiter

$ cut -d - -f1 DC

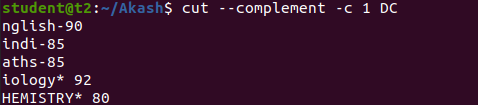
$ cut -d - -f2 DC

Output:



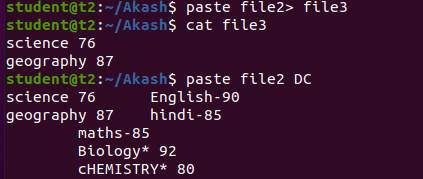
 iv.. cut - complement: Cut by complement pattern

$ cut - - complement -c 1 DC



1. paste: Paste command is used to join files consist of lines from each file horizontally outputing lines.
2. $ paste file2 DC

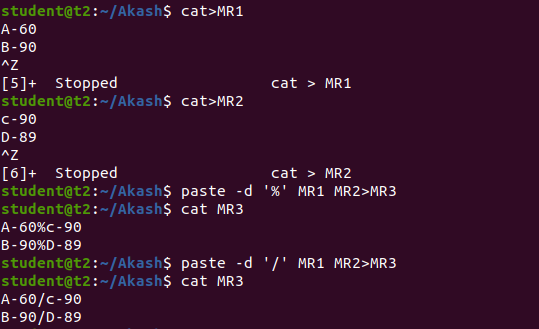
Output:



ii.$ paste -d ‘%’ MR1 MR2 >MR3

$ cat MR3

Output:



**Experiment no:5                                                                                     Date:16-03-2023**

**Aim:** Familiarization with Linux command.

**CO2:** Perform system administration tasks.

**Procedure:**

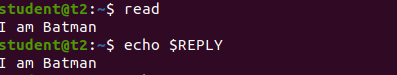
1. read : The Linux **read** command is used to read the contents of a line

$ read

$ echo $REPLY : command will display the stored input from the 'REPLY' variable.

$ echo $REPLY

**Output Screenshot**

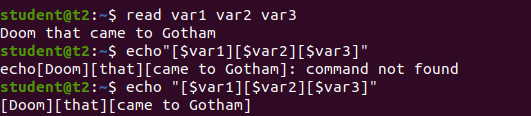


1. $ read var1 var2 var3

$ read var1 var2 var3

Doom that came to Gotham

**Output Screenshot**



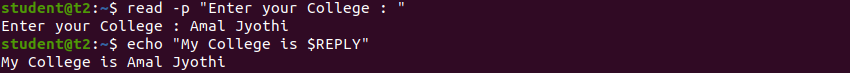
1. read \  :running multi-line commands from a single command-line prompt.

**Output Screenshot**



1. read -p : The '-p' option is used for the **prompt text**.

**Output Screenshot**



1. read -n  The '-n' option limits the length of the character in the entered text.

**Output Screenshot**

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1. read-s : This option is used for **security purpose**. It is used to read the sensitive data.

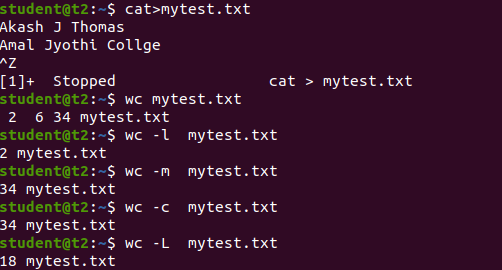
**Output Screenshot**

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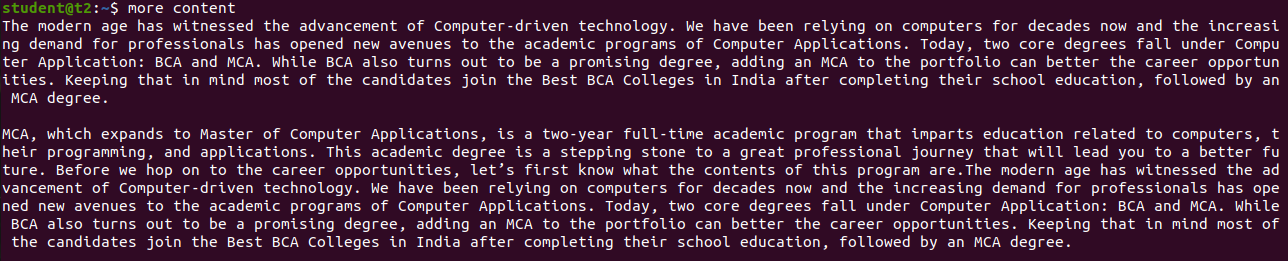
1. wc  : Linux wc command helps in counting the lines, words, and characters in a file.
2. wc -l  The '-l' option is used to display the number of lines in a file.
3. wc -m  The '-m' option is used to display the number of characters in a file.
4. wc -c  The '-c' option is used to display the number of bytes in a file.
5. wc –L : The '-L' option is used to display the length of the longest line from a file.

**Output Screenshot**

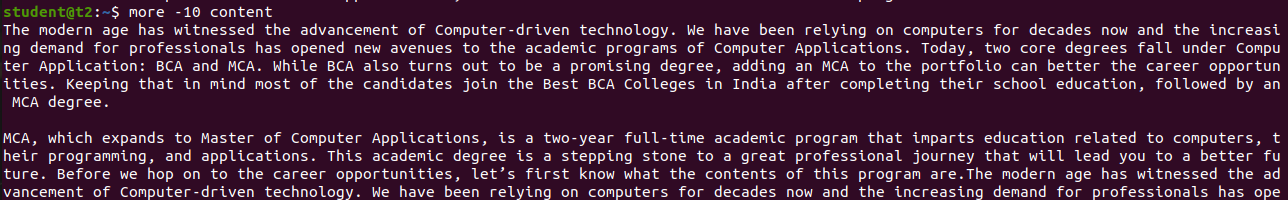
****

1. more : more' command also displays the content of a file. Only difference is that, in case of larger files, 'cat' command output will scroll off your screen while 'more' command displays output one screenful at a time.

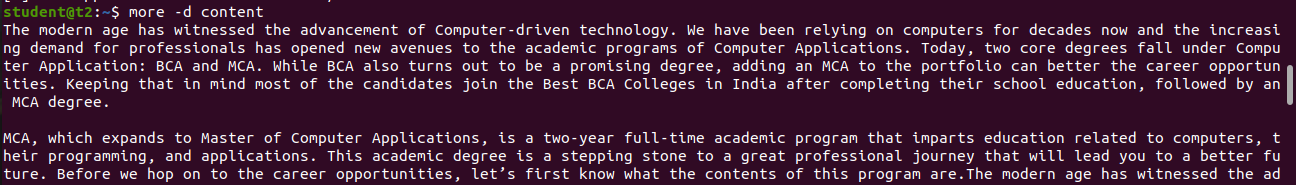
**Output Screenshot**

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**Output Screenshot**



**Output Screenshot**



1. Less : It shows a files contents one scree at a time.
   1. Ctrl + f : Forward one window.
   2. Ctrl + d : Forward half window.
   3. Ctrl + b: Backward one window.
   4. Ctrl + u: Backward half window.
   5. Ctrl + j: Forward by one line.
   6. Ctrl +k :Backward by one line.

**Experiment no:6 Date:17-03-2023**

**Aim:** Familiarization with Linux command.

**CO2:** Perform system administration tasks.

**Procedure:**

1. grep: grep filters a content of a file,which make our search easy.
2. $grep [content] [filename]

$grep 89 mark1

**Output Screenshot**



1. Grep -i English mark1

**Output Screenshot**

1. Grep -A1 Science mark1

**Output Screenshot**



1. Grep -B2 :To display 2 line before the search content

$grep -B2 Maths mark1

**Output Screenshot**



1. $grep -C1 : To display one line before and after the search content

$grep -C1 Maths mark1

**Output Screenshot**



1. grep -v To Display the content except the searched content.

$grep -v Malayalam mark1

**Output Screenshot**



1. $cat mark1|grep 9

**Output Screenshot**



1. head : It is used to print the first 10 lines of specified file.

$head lines

**Output Screenshot**

head -5 : To Display the first Five lines in the file

$head -5 lines

**Output Screenshot**



1. tail : It is used to print the below 10 lines of the specified files.

$tail lines

**Output Screenshot**



tail -5 : To display the last five lines in the specified file.

$tail -5 lines

**Output Screenshot**



**Experiment no:7 Date:23-03-2023**

**Aim:** Familiarization with Linux command.

**CO2:** Perform system administration tasks.

**Procedure:**

1. expr : It is a command in Linux which is used to evaluate a given expression and display the output.

**Output Screenshot**

* 1. $expr 12 12+8

**Output Screenshot**

b. $expr 12\\*2

**Output Screenshot**

c. read : to read value from user.

$read x

25

$read y

15

$expr $x + $y

40

$expr $x/$y

**Output Screenshot**

2. df : Command in linux used to display information aboutb disc utilization of our file system.

$df

**Output Screenshot**

3. $du : Inoder to identify space utilized by a file.

$du a.txt

**Output Screenshot**

4. ps : To check the currently running process.

$ps

**Output Screenshot**

5. ps -u :Specify the currently running process of tha user.

$ps -u student

**Output Screenshot**

6. $sudo useradd : To create a new user.

$sudo useradd akash

**Output Screenshot**

a. $sudo passwd : To Set password.

**Output Screenshot**

b. $sudo group-g : To create a group.

$sudo group-g 1234 mcastaff.

**Output Screenshot**

c. sudo usermod -G : Assign a user to a particular group.

$sudo usermod -G mcastaff akash

**Output Screenshot**

7. id : identify user is in which group.

$id akash

**Output Screenshot**

8. compgen -g : Gives group information

$compgen -g

**Output Screenshot**

**Experiment no:8 Date:24-03-2023**

**Aim:** Familiarization with Linux command.

**CO2:** Perform system administration tasks.

**Procedure:**

1. chmod : Used to change the access permission of the files and directories and it stands for change mode.

a. chmode -wx : Denied the permission to write and execute.

$chmod -wx file.txt

b. chmode +wx : Allow the permission to write and execute.

2. $sudo chown : Used to change file ownership or directory ownership for a user or a group.

$sudo chown akash file.txt

3. $ip addr : To identify the ip address.

4. ssh :Stands for secure shell. Used to connect securely to remote system/server.It transpose data in an encrypted form between host and client.

$ssh [mca@192.168.40](mailto:mca@192.168.40)

a. $ssh -keygen : Command to generate a key for an authentication purpose.