

**ABHISHEK SHARMA**

**CS THIRD YEAR**

**SECTION : "I"**

**ROLL NO.: 01**

**ENROLLMENT NO.: 12019009001127**

**OPERATING SYSTEMS LABORATORY**

**DAY 3**

# **ASSIGNMENT 3**

**DATE : 02.08.2021**

**PLATFORM USED : UBUNTU 20.04 LTS**

**UNIVERSITY OF ENGINEERING & MANAGEMENT, KOLKATA  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

1. List all files beginning with character “a” on the screen and also store them in a file called file1.

```
abhisheks008@LAPTOP-9RGGUF05:~$ ls [a]*
afile1 afile2 afile3
abhisheks008@LAPTOP-9RGGUF05:~$ ls | ls [a]* >> file1
abhisheks008@LAPTOP-9RGGUF05:~$ cat file1
afile1
afile2
afile3
```

2. Select lines 5 to 10 of the file .

```
abhisheks008@LAPTOP-9RGGUF05:~$ sed -n -e '5,10p' file1
5
6
7
8
9
10
```

3. Show the number of rows and columns of the terminal you are working.

```
abhisheks008@LAPTOP-9RGGUF05:~$ tput cols
120
abhisheks008@LAPTOP-9RGGUF05:~$ tput lines
30
```

4. Print “This text in bold” in terminal.

```
abhisheks008@LAPTOP-9RGGUF05:~$ tput bold; echo "This text in Bold"
This text in Bold
```

5. Print “This text is underlined”.- as shown.

```
abhisheks008@LAPTOP-9RGGUF05:~$ tput smul; echo "This text in Bold"
This text in Bold
```

6. What would you type at the command line to find out how many total lines are contained in all the files ending in .txt in the current directory, printing only the total number of lines?

```
abhisheks008@LAPTOP-9RGGUF05:~$ find . -name '*.txt'
./text.txt
./text1.txt
abhisheks008@LAPTOP-9RGGUF05:~$ find . -name '*.txt' | xargs wc -l
 8 ./text.txt
 5 ./text1.txt
13 total
```

7. Find the user name and group id from the file /etc/passwd using the cut command.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cut -f 1,7 -d: /etc/passwd | tr ":" " " | sort -k 1 | sort -k 2
abhisheks008 /bin/bash
root /bin/bash
pollinate /bin/false
tss /bin/false
sync /bin/sync
_apt /usr/sbin/nologin
backup /usr/sbin/nologin
bin /usr/sbin/nologin
daemon /usr/sbin/nologin
games /usr/sbin/nologin
gnats /usr/sbin/nologin
irc /usr/sbin/nologin
landscape /usr/sbin/nologin
list /usr/sbin/nologin
lp /usr/sbin/nologin
mail /usr/sbin/nologin
man /usr/sbin/nologin
messagebus /usr/sbin/nologin
news /usr/sbin/nologin
nobody /usr/sbin/nologin
proxy /usr/sbin/nologin
sshd /usr/sbin/nologin
sys /usr/sbin/nologin
syslog /usr/sbin/nologin
systemd-network /usr/sbin/nologin
systemd-resolve /usr/sbin/nologin
systemd-timesync /usr/sbin/nologin
tcpdump /usr/sbin/nologin
uucp /usr/sbin/nologin
uudd /usr/sbin/nologin
www-data /usr/sbin/nologin
```

8. Device a sequence which lists the five largest files in the current directory.

```
abhisheks008@LAPTOP-9RGGUF05:~$ ls -Sr | tail -n 5
afile3
afile2
afile1
file1
text.txt
```

9. Create two files "name" and "surname". Merge the both files.

```
abhisheks008@LAPTOP-9RGGUF05:~$ cat >Name
Abhishek
Sayan
Nabarun
Digbijoy
Udayan
Raktim
abhisheks008@LAPTOP-9RGGUF05:~$ cat >Surname
Sharma
Mukherjee
Mukhopadhyay
Dasgupta
Misra
Karmakar
abhisheks008@LAPTOP-9RGGUF05:~$ cat Name Surname > Fullname
abhisheks008@LAPTOP-9RGGUF05:~$ cat Fullname
Abhishek
Sayan
Nabarun
Digbijoy
Udayan
Raktim
Sharma
Mukherjee
Mukhopadhyay
Dasgupta
Misra
Karmakar
```

```
abhisheks008@LAPTOP-9RGGUF05:~$ paste Name Surname
Abhishek      Sharma
Sayan  Mukherjee
Nabarun Mukhopadhyay
Digbijoy      Dasgupta
Udayan  Misra
Raktim  Karmakar
```

10. Sort the file "surname".

```
abhisheks008@LAPTOP-9RGGUF05:~$ sort Surname
Dasgupta
Karmakar
Misra
Mukherjee
Mukhopadhyay
Sharma
```

```
abhisheks008@LAPTOP-9RGGUF05:~$ sort -f Surname
Dasgupta
Karmakar
Misra
Mukherjee
Mukhopadhyay
Sharma
```

11. Print only the first letter of "surname".

```
abhisheks008@LAPTOP-9RGGUF05:~$ cut -c 1-1 < Surname
```

```
S  
M  
M  
D  
M  
K
```

```
abhisheks008@LAPTOP-9RGGUF05:~$ cut -b 1 Surname
```

```
S  
M  
M  
D  
M  
K
```

12. Write a line and replace the space with ":" sign.

```
abhisheks008@LAPTOP-9RGGUF05:~$ echo "My name is Abhishek Sharma" | tr " " ":"
```

```
My:name:is:Abhishek:Sharma
```

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