

Lab Mid

Course Code: CL205	Course Name: Operating Systems Lab
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Student Roll No:	Section:

"Be willing to take a chance, because you never know how perfect something could turn out to be."

BEST OF LUCK!

Instructions

- Rules are made to break them. So, invent yours and I'll break.

Time: 60 minutes.

Max Marks: 40 points

(5 marks)

1. Create the following directories with one command. dirOSLAB -> subDir -> subsubdir -> OSQuiz

2. Create a shortcut link in /opt directory of the directory "quiz" present in ~/.

3. Create a write-only file in your home directory.

4. List the files in the directory "/etc" that have "network" in their strings.

5. Copy the contents of the file 'datum.txt' to a file datum_copied.txt

```
for i in { 1 . . 10 . . 2 }
```

```
do
```

```
echo "Hey!!"
```

```
done
```

What is the output?

(2.5 marks)

Write a Bash script where you assign two strings to different variables, and then the program prints both of those strings. Write a version where the strings are printed on the same line, and a version where the strings are printed on different lines. **(2.5 marks)**

Write a shell script to accept 10 number and tell how many are +ve, -ve and zero. Also display them in ascending order. **(5 marks)**

Write a function in Bash script called plier which multiplies together a sequence of numbers.

plier 2 6 4

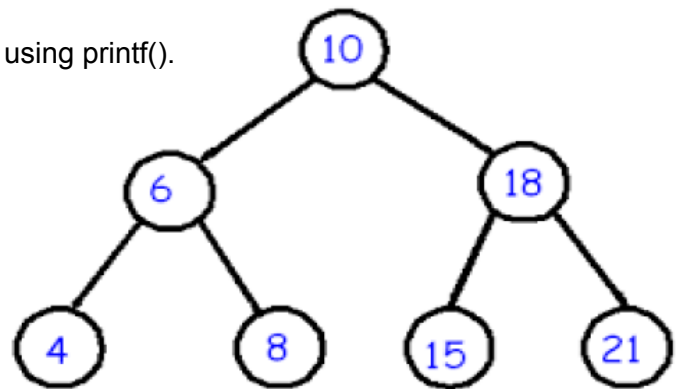
(5 marks)

output: 48

Write a c program for this process tree.

Each node will print its name and PID but by not using printf().

(10 marks)



Write System calls for Shared Memory other than shmget (10 marks)

- 1.
- 2.

System call for named pipe is _____.

System call for unnamed pipe is _____.

System call for pushing your message in queue is _____.

Explain functions and their arguments:

`msgrcv(msgid,&msg,sizeof(msg),1,0);`

`shmget(key, MAXSIZE, IPC_CREAT | 0666);`

`write(fd,buffer,sizeof(buffer));`

Bonus Question:

Write anything which proves me you are a Linux User. Bonus marks depends on your creativity.