

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

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

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

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

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

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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**

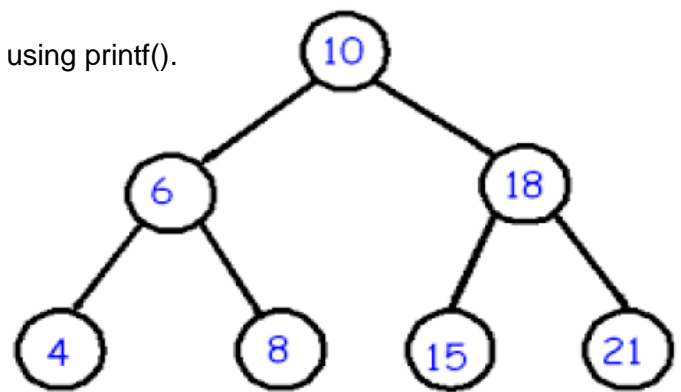
**(5 marks)**

**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.