

Lab Mid

Course Code: CL205	Course Name: Operating Systems Lab
Instructor Name: Sumaiyah Zahid	
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. Display lines from planets.txt which has the term 'earth' in the line and put the output to the file 'search_result.txt'

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

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

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

5. Copy all files in the current directory whose names end in ".c" or ".h" into the subdirectory "Programs".

Differentiate between "sh" and "bash".

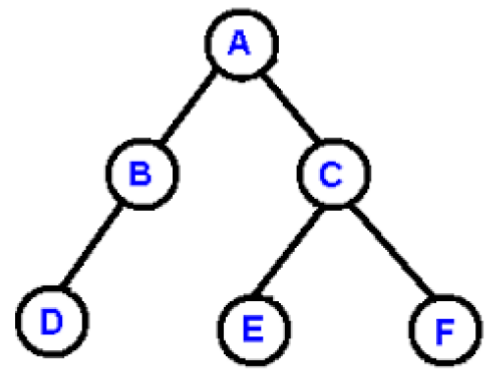
(2.5 marks)

Write a Bash program that prints the number of arguments provided to that program multiplied by the first argument provided to the program. **(3 marks)**

Write a Bash script that takes two arguments. If both arguments are numbers, print their sum, otherwise just print both arguments. **(4.5 marks)**

Write a script to find out String is palindrome or not. **(5 marks)**

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 generating key is _____.

Explain functions and their arguments:

shmid = shmget(key, MAXSIZE, IPC_CREAT | 0666)

msgsnd(msgid,&msg,sizeof(msg),0)

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

Bonus Question:

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