

Assignment
CSE 324: Operating Systems Lab
Fall-22

Read the problem carefully, solved it and submit the lab report.

1. Write command and execute for the following:

- I. Show the current directory
- II. Show list of files on that directory
- III. Change the directory to Desktop and create a folder (folder name should be your id)
- IV. Create two file and write something there.
- V. Concatenate them to another file.
- VI. Create another file and write something about yourself.

2. Write a shell script to show a welcome message, current directory, list of files on that directory and user name.

3. Write a shell script to show the summation, subtraction, multiplication and division of two numbers.

4. Write a shell script which will take a number as input and find out whether it is ODD or EVEN.

5. Write a shell script which will take a marks(marks between 0 and 100) as input and find out its grade based on the following condition:

If marks is greater than or equal 80 and less than or equal to 100; then " A+"

If marks is greater than or equal 60 and less than or equal to 79 ; then " A"

If marks is greater than or equal 50 and less than or equal to 59; then " B"

Otherwise " Fail"

6. Write a shell script which will take a number as input and find out it's factorial.

7. Write a shell script which will take a range as input and find out its Fibonacci series.

8. Write a shell script which will take number of row as input and show the following pattern using loop.

```
1
2 2
3 3 3
4 4 4 4
5 5 5 5 5
```

9. Write a shell script which will take a number as input and find out the output of the following series using function.

$$22 + 42 + 62 + \dots + n$$

10. Write a shell script which will take a number as input and find out whether it is palindrome or not using function. The script will continue again if you press y and exit if you press n.

11. Write a program in C to show the gantt chart, the waiting time and turnaround time of First Come First Serve (FCFS) CPU scheduling algorithm and execute it on Ubuntu terminal.

Sample input

Process	Arrival Time	Burst Time
P ₁	0	5
P ₂	1	2
P ₃	3	1
P ₄	4	3
P ₅	4	2

12. Write a program in C to show the gantt. Chart, the waiting time and turnaround time of SJF CPU scheduling algorithm and execute it on Ubuntu terminal.

Sample input

Process	Arrival Time	Burst Time
P ₁	0	2
P ₂	1	5
P ₃	3	3
P ₄	4	1