

1. Write a shell script to generate mark- sheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.

Output:

```
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./marksheet.sh
----- STUDENT MARKSHEET -----
Enter Student Name: Shreyansh Singh
Enter Roll Number: CM24113
Enter marks for Subject 1: 90
Enter marks for Subject 2: 80
Enter marks for Subject 3: 70

----- MARKSHEET -----
Name      : Shreyansh Singh
Roll No   : CM24113
Subject 1 : 90
Subject 2 : 80
Subject 3 : 70
Total Marks : 240 / 300
Percentage : 80 %
Class     : Distinction
-----
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ |
```

2. Write a menu driven shell script which will print the following menu and

execute the given task.

- Display calendar of current month.
- Display today's date and time.
- Display usernames those are currently logged in the system.
- Display your terminal number

Output:

```
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ nano menu.sh
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./menu.sh
----- MENU PROGRAM -----
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
5. Exit
-----
Enter your choice: 1
Tue Jan 20 14:48:23 IST 2026
----- MENU PROGRAM -----
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
5. Exit
-----
Enter your choice: 2
Tue Jan 20 14:48:28 IST 2026
----- MENU PROGRAM -----
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
5. Exit
-----
Enter your choice: 3
User
----- MENU PROGRAM -----
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
5. Exit
-----
Enter your choice: 4
/dev/pty0
```

3. Write a shell script which will generate first n Fibonacci numbers like:  
1, 1, 2, 3, 5, 1

Output:

```
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ nano number.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ chmod +x number.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./number.sh
Enter how many Fibonacci numbers to generate: 1
First 1 Fibonacci numbers:
1

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./number.sh
Enter how many Fibonacci numbers to generate: 2,3,5,13
First 2,3,5,13 Fibonacci numbers:
1 1 2 3 5 8 13 21 34 55 89 144 233

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ |
```

4. Write a shell script which  
will accept a number b and display first n prime numbers as output

Output:

```
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ nano prime.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ chmod +x prime.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./prime.sh
Enter how many prime numbers to generate: 10
First 10 prime numbers:
2 3 5 7 11 13 17 19 23 29

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ |
```

## 5. Write menu driven program for file handling activity

- Creation of file.
- Write content in the file.
- Append content to file.
- Delete file content

Output:

```
User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ nano file.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ chmod +x file.sh

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$ ./file.sh
-----
      FILE HANDLING MENU
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
5. Exit
-----
Enter your choice (1-5): 1
Enter file name to create: Shreyansh
File created successfully.

Press Enter to continue...
-----
      FILE HANDLING MENU
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
5. Exit
-----
Enter your choice (1-5): 2
Enter file name to write: Shreyansh
Enter content (Press CTRL+D to save):
USN CM24113
Content written successfully.

Press Enter to continue...
-----
      FILE HANDLING MENU
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
5. Exit
-----
Enter your choice (1-5): 3
Enter file name to append: Shreyansh
Enter content to append (Press CTRL+D to save):
Sec B CSE(AI6ML)
Content appended successfully.

Press Enter to continue...
-----
      FILE HANDLING MENU
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
5. Exit
-----
Enter your choice (1-5): 4
Enter file name to delete content: Shreyansh
File content deleted successfully.

Press Enter to continue...
-----
      FILE HANDLING MENU
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
5. Exit
-----
Enter your choice (1-5): 5
Exiting... Goodbye!

User@DESKTOP-1UJ64CI MINGW64 /c/OSLab_CM24113 (master)
$
```