

1. Write a shell script to generate marksheet of a student. Take 3 subjects, calculate and display total marks, percentage and class obtained by the student.

```
MINGW64:/c/OSLAB_CM24064
$ nano marksheet.sh
ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ ./marksheet.sh
----- STUDENT MARKSHEET -----
Enter Student Name: aditya
Enter Roll Number: CM24064
Enter marks for Subject 1: 88
Enter marks for Subject 2: 76
Enter marks for Subject 3: 81
----- MARKSHEET -----
Name : aditya
Roll No : CM24064
Subject 1 : 88
Subject 2 : 76
Subject 3 : 81
Total Marks : 245 / 300
Percentage : 81 %
Class : Distinction
-----
```

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 your terminal number

Display usernames those are currently logged in the system

```
MINGW64:/c/OSLAB_CM24064
$ nano menu.sh
ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ ./menu.sh
----- MENU OPTIONS -----
1. Display calendar of current month
2. Display today's date and time
3. Display currently logged in usernames
4. Display your terminal number
5. Exit
-----
Enter your choice (1-5): 1
Calendar of current month:
Tue Jan 20 23:19:59 IST 2026
Press Enter to continue...
----- MENU OPTIONS -----
1. Display calendar of current month
2. Display today's date and time
3. Display currently logged in usernames
4. Display your terminal number
5. Exit
-----
Enter your choice (1-5): 2
Today's date and time:
Tue Jan 20 23:20:06 IST 2026
Press Enter to continue...
----- MENU OPTIONS -----
1. Display calendar of current month
2. Display today's date and time
3. Display currently logged in usernames
4. Display your terminal number
5. Exit
-----
Enter your choice (1-5): 3
Users currently logged in:
ADITYA
Press Enter to continue...
----- MENU OPTIONS -----
1. Display calendar of current month
2. Display today's date and time
3. Display currently logged in usernames
4. Display your terminal number
5. Exit
-----
Enter your choice (1-5): 4
Your terminal number:
/dev/pty0
Press Enter to continue...
----- MENU OPTIONS -----
1. Display calendar of current month
2. Display today's date and time
3. Display currently logged in usernames
4. Display your terminal number
5. Exit
-----
Enter your choice (1-5): 5
Exiting... Goodbye!
$ |
```

3. Write a shell script which will generate first n Fibonacci numbers like: 1, 1, 2, 3, 5, 13

```
MINGW64:/c/OSLAB_CM24064
ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ nano fibonacci.sh

ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ ./fibonacci.sh
Enter how many Fibonacci numbers to generate: 8
First 8 Fibonacci numbers:
1 1 2 3 5 8 13 21

ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$
```

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

```
MINGW64:/c/OSLAB_CM24064
ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ nano prime.sh

ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ ./prime.sh
Enter how many prime numbers to generate: 7
First 7 prime numbers:
2 3 5 7 11 13 17

ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$
```

5. Write menu driven program for file handling activity

Creation of file

Write content in the file

Upend file content

Delete file content

```
MINGW64:/c/OSLAB_CM24064
ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ nano file_menu.sh

ADITYA@LAPTOP-LGILNSEK MINGW64 /c/OSLAB_CM24064 (main)
$ ./file_menu.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: aditya
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: aditya
Enter content (Press CTRL+D to save):
CM24064
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: aditya
Enter content (Press CTRL+D to save):
Section B CSE[AIAML]
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: aditya
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!
```