

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.

```
MINGW64:/c/Users/eyesf/Documents/OS_CM24119

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./marksheet.sh
----- STUDENT MARKSHEET -----
Enter Student Name: Tushar Khangare
Enter Roll Number: CM24119
Enter marks for Subject 1: 88
Enter marks for Subject 2: 78
Enter marks for Subject 3: 91

----- MARKSHEET -----
Name       : Tushar Khangare
Roll No    : CM24119
Subject 1  : 88
Subject 2  : 78
Subject 3  : 91
Total Marks : 257 / 300
Percentage  : 85 %
Class      : Distinction
-----

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ |
```

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

. Display calendar of current month

e Display today's date and time

e Display usernames those are currently logged in the system

o Display Your terminal number

```
MINGW64/c/Users/eyesf/Documents/OS_CM24119

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ nano menu.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ chmod +x menu.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (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 21:22:12 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 21:22:19 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:
eyesf

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/pty1

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/Users/eyesf/Documents/OS_CM24119

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ nano prime.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ chmod +x prime.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./prime.sh
Enter how many prime numbers to generate: 10
First 10 prime numbers:
2 3 5 7 11 13 17 19 23 29

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./prime.sh
Enter how many prime numbers to generate: 20
First 20 prime numbers:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ |
```

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

```
eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ nano fibonacci.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ chmod +x fibonacci.sh

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./fibonacci.sh
Enter how many Fibonacci numbers to generate: 10
First 10 Fibonacci numbers:
1 1 2 3 5 8 13 21 34 55

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./fibonacci.sh
Enter how many Fibonacci numbers to generate: 20
First 20 Fibonacci numbers:
1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765

eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$
```

5. Write menu driven program for file handling activity

- o Creation of file
- o Write content in the file
- o Upend file content
- Delete file content

```
MINGW64/c/Users/eyesf/Documents/OS_CM24119
eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ ./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: Tushar
File already exists.
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: Tushar
Enter content (Press CTRL+D to save):
CM24119Content 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: Tushar
Enter content to append (Press CTRL+D to save):
Sec B CSE(AI&MT)
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: Tushar
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!
eyesf@Tushar MINGW64 ~/Documents/OS_CM24119 (main)
$ |
```