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.

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ echo "Enter marks of Subject 1:"
read m1
echo "Enter marks of Subject 2:"
read m2
echo "Enter marks of Subject 3:"
read m3

total=$((m1 + m2 + m3))
percentage=$((total / 3))

echo "Total = $total"
echo "Percentage = $percentage%"

if [ $percentage -ge 75 ]
then
  echo "Class: Distinction"
elif [ $percentage -ge 60 ]
then
  echo "Class: First Class"
elif [ $percentage -ge 50 ]
then
  echo "Class: Second Class"
else
  echo "Class: Fail"
fi
Enter marks of Subject 1:
```

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ nano marksheet.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ chmod +x marksheet.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ ./marksheet.sh
Enter marks of Subject 1:
88
Enter marks of Subject 2:
83
Enter marks of Subject 3:
80
Total = 251
Percentage = 83%
Class: Distinction

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$
```

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

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ #!/bin/bash

echo "----------------------------"
echo "        MENU"
echo "----------------------------"
echo "1. Display calendar of current month"
echo "2. Display today's date and time"
echo "3. Display usernames currently logged in"
echo "4. Display your terminal number"
echo "----------------------------"
echo "Enter your choice:"
read ch

case $ch in
1)
    cal
    ;;
2)
    date
    ;;
3)
    who
    ;;
4)
    tty
    ;;
*)
    echo "Invalid Choice"
    ;;
esac
----------------------------
        MENU
----------------------------
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
----------------------------
Enter your choice:
```

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ nano menu.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ chmod +x menu.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ ./menu.sh
----------------------------
        MENU
----------------------------
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display your terminal number
----------------------------
Enter your choice:
4
/dev/pty0

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$
```

3. Write a shell script which with generate first n Fibonacci numbers like: I, L,2, 3, 5,13

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ #!/bin/bash

echo "Enter the number of terms:"
read n

a=0
b=1

echo "Fibonacci Series:"
for ((i=1; i<=n; i++))
do
    echo -n "$a "
    c=$((a + b))
    a=$b
    b=$c
done
echo
Enter the number of terms:
```

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ nano fibonacci.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ chmod +x fibonacci.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ ./fibonacci.sh
Enter the number of terms:
7
Fibonacci Series:
0 1 1 2 3 5 8

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$
```

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

as output

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ nano prime.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ chmod +x prime.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ ./prime.sh
Enter the value of n:
22
First 22 prime numbers are:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$
```

5. Write menu driven program for file handling activity Creation of file to Write content in the file Upend file content Delete file content

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ nano filehandling.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ chmod +x filehandling.sh

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ ./filehandling.sh
---------------------------
   FILE HANDLING MENU
---------------------------
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
---------------------------
Enter your choice:
2
Enter file name:
Saniya
Enter content to write:
OS_Repository
./filehandling.sh: line 25: Saniya: Is a directory
Content written to file

Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$
```

```
Saniya Tagde@LAPTOP-FSOUOMFO MINGW64 ~/OneDrive/Desktop
$ #!/bin/bash

echo "----------------------------"
echo "   FILE HANDLING MENU"
echo "----------------------------"
echo "1. Create a file"
echo "2. Write content to file"
echo "3. Append content to file"
echo "4. Delete file content"
echo "----------------------------"
echo "Enter your choice:"
read ch

echo "Enter file name:"
read fname

case $ch in
1)
    touch $fname
    echo "File created successfully"
    ;;
2)
    echo "Enter content to write:"
    read content
    echo "$content" > $fname
    echo "Content written to file"
    ;;
3)
    echo "Enter content to append:"
    read content
    echo "$content" >> $fname
    echo "Content appended to file"
    ;;
4)
    > $fname
    echo "File content deleted"
    ;;
*)
    echo "Invalid choice"
    ;;
esac
----------------------------
   FILE HANDLING MENU
----------------------------
1. Create a file
2. Write content to file
3. Append content to file
4. Delete file content
----------------------------
Enter your choice:
```