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.

```
Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ chmod +x practical1.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ ./practical1.sh
Enter marks of subject 1:
85
Enter marks of subject 2:
78
Enter marks of subject 3:
90
Total Marks: 253
Percentage: 84%
Class: Distinction
```

MINGW64:/c/Users/Asus/Desktop/shell_practical

```
  GNU nano 8.7
#!/bin/bash

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 Marks: $total"
echo "Percentage: $percentage%"

if [ $percentage -ge 75 ]
then
  echo "Class: Distinction"
elif [ $percentage -ge 60 ]
then
  echo "Class: First Class"
elif [ $percentage -ge 40 ]
then
  echo "Class: Pass"
else
  echo "Class: Fail"
fi
```

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

```
Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ touch practical2.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ nano practical2.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ nano practical2.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ chmod +x practical2.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ ./practical2.sh
1. Display calendar of current month
2. Display today's date and time
3. Display usernames currently logged in
4. Display terminal number
Enter your choice:
2
Tue Jan 20 19:43:21 IST 2026
```

MINGW64:/c/Users/Asus/Desktop/shell_practical

```
  GNU nano 8.7
#!/bin/bash

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 terminal number"
echo "Enter your choice:"
read ch

case $ch in
1) cal ;;
2) date ;;
3) who ;;
4) tty ;;
*) echo "Invalid choice" ;;
esac
```

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

```
Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ touch practical3.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ nano practical3.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ chmod +x practical3.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ ./practical3.sh
Enter number of terms:
6
Fibonacci series:
1
1
2
3
5
8
```

MINGW64:/c/Users/Asus/Desktop/shell_practical

```
  GNU nano 8.7
#!/bin/bash

echo "Enter number of terms:"
read n

a=1
b=1

echo "Fibonacci series:"
echo $a
echo $b

for (( i=3; i<=n; i++ ))
do
  c=$((a + b))
  echo $c
  a=$b
  b=$c
done
```

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

```
Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ touch practical4.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ nano practical4.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ chmod +x practical4.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ ./practical4.sh
Enter how many prime numbers:
5
2
3
5
7
11
```

MINGW64:/c/Users/Asus/Desktop/shell_practical

```
  GNU nano 8.7
#!/bin/bash

echo "Enter how many prime numbers:"
read n

count=0
num=2

while [ $count -lt $n ]
do
  flag=1
  for (( i=2; i<=num/2; i++ ))
  do
    if [ $((num % i)) -eq 0 ]
    then
      flag=0
      break
    fi
  done

  if [ $flag -eq 1 ]
  then
    echo $num
    count=$((count + 1))
  fi

  num=$((num + 1))
done
```

5. Write menu driven program for file handling activity

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

```
Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ touch practical5.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ nano practical5.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ chmod +x practical5.sh

Asus@LAPTOP-M02HFD9C MINGW64 ~/Desktop/shell_practical
$ ./practical5.sh
1. Create file
2. Write to file
3. Append to file
4. Delete file content
Enter your choice:
1
Enter filename:
test.txt
File created
```

MINGW64:/c/Users/Asus/Desktop/shell_practical

```
  GNU nano 8.7
#!/bin/bash

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

echo "Enter filename:"
read fname

case $ch in
1)
  touch $fname
  echo "File created"
  ;;
2)
  echo "Enter content:"
  read content
  echo "$content" > $fname
  ;;
3)
  echo "Enter content:"
  read content
  echo "$content" >> $fname
  ;;
4)
  > $fname
  echo "File content deleted"
  ;;
*)
  echo "Invalid choice"
  ;;
esac
```