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

```
Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ git config --global user.name AtharvAkhud

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ git config --global user.email atharvakhud2005@gmail.com

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ #!/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 60 ]; then
    echo "Class: First Class"
elif [ $percentage -ge 50 ]; then
    echo "Class: Second Class"
elif [ $percentage -ge 40 ]; then
    echo "Class: Pass"
else
    echo "Class: Fail"
fi
Enter marks of subject 1:
87
Enter marks of subject 2:
8
Enter marks of subject 3:
87
Total Marks = 182
Percentage = 60%
Class: First Class

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$
```

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

```
Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ #!/bin/bash

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

case $choice in
1)
    echo "Current Month:"
    date +"%B %Y"
    ;;
2)
    date
    ;;
3)
    who
    ;;
4)
    tty
    ;;
*)
    echo "Invalid choice"
    ;;
esac
1. Display calendar of current month
2. Display today's date and time
3. Display logged in usernames
4. Display terminal number
Enter your choice:
1
Current Month:
January 2026

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ |
```

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

```
Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ #!/bin/bash

echo "Enter 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 number of terms:
2
Fibonacci Series:
0 1

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ |
```

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

```
Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ #!/bin/bash

echo "Enter number of prime numbers:"
read n

count=0
num=2

echo "Prime Numbers:"
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 [ $flag -eq 1 ]; then
        echo -n "$num "
        count=$((count + 1))
    fi
    num=$((num + 1))
done
echo
Enter number of prime numbers:
9
Prime Numbers:
2 3 5 7 11 13 17 19 23

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ |
```

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

```
Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ #!/bin/bash

echo "Enter file name:"
read file

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

case $choice in
1)
    touch $file
    echo "File created"
    ;;
2)
    echo "Enter content (Ctrl+D to save):"
    cat > $file
    ;;
3)
    echo "Enter content to append (Ctrl+D to save):"
    cat >> $file
    ;;
4)
    > $file
    echo "File content deleted"
    ;;
*)
    echo "Invalid choice"
    ;;
esac
Enter file name:
test.txt
1. Create file
2. Write content
3. Append content
4. Delete file content
Enter choice:
1
File created

Student@DESKTOP-JJ8CFNB MINGW64 ~/Desktop/os_cd24007
$ |
```