

Practical 2

1. Aim: 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/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ #!/bin/bash

echo "Enter marks of OS:"
read m1
echo "Enter marks of Maths:"
read m2
echo "Enter marks of English:"
read m3

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

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

if [ $percentage -ge 60 ]; then
    echo "Class obtained: First class"
elif [ $percentage -ge 50 ]; then
    echo "Class obtained: Second class"
elif [ $percentage -ge 40 ]; then
    echo "Class obtained: Pass"
else
    echo "Class obtained: Fail"
fi

Enter marks of OS:
70
Enter marks of Maths:
60
Enter marks of English:
40
-----
Total Marks: 170
Percentage: 56%
Class obtained: second class
```

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

- 1) Display calendar of current month.

```
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ #!/bin/bash
date +"%B %Y"

January 2026

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

- 2) Display today's date and time.

```
MINGW64:/c/Users/Dell/OneDrive/Desktop

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ date
Fri Jan 23 19:46:52 IST 2026

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

- 3) Display usernames those are currently logged in the system.

```
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
whoami

Dell

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

4) Display your terminal number.

```
MINGW64:/c/Users/Dell/OneDrive/Desktop

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
echo $TERM

xterm

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

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

```
MINGW64:/c/Users/Dell/OneDrive/Desktop

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ #!/bin/bash

echo "Enter value of n:"
read n

a=1
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 value of n:
20
Fibonacci series:
1 1 2 3 5 8 13 21 34 55 89 144 233 377 610 987 1597 2584 4181 6765

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

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

```
MINGW64/c/Users/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ #!/bin/bash

echo "Enter value of n:"
read n

count=0
num=2

echo "First $n Prime Numbers:"

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

Enter value of n:
40
First 40 Prime Numbers:
2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79 83 89 97 101 103 107 109 113 127 131 137 139 149 151 157 163 167 173
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
```

5. Aim: Write menu driven program for file handling activity.
1) Creation of file.

```
MINGW64/c/Users/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
echo "Enter file name:"
read fname
touch "$fname"
echo "File created"

Enter file name:
arya.txt
File created

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

2) Write content in the file.

```
MINGW64/c/Users/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
echo "Enter file name:"
read fname
echo "Type content (Ctrl+Z then Enter):"
cat > "$fname"

Enter file name:
arya.txt
Type content (Ctrl+Z then Enter):
hello arya

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ cat arya.txt
hello arya

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

3) Append file content.

```
MINGW64/c/Users/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
echo "Enter file name:"
read fname
echo "Enter content to append :"
cat >> "$fname"

Enter file name:
arya.txt
Enter content to append :
hello
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ cat arya.txt
hello arya
hello
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```

4) Delete file content.

```
MINGW64:/c:/Users/Dell/OneDrive/Desktop
Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$
echo "Enter file name:"
read fname
> $fname
echo "File content deleted"

Enter file name:
arya.txt
File content deleted

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ cat arya.txt

Dell@DESKTOP-36N7A9E MINGW64 ~/OneDrive/Desktop (main)
$ |
```