Output :-

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.

Code:-

```
  GNU nano 7.2                              marksheet.sh
#!/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))

if [ $percentage -ge 75 ]; then
    class="Distinction"
elif [ $percentage -ge 60 ]; then
    class="First Class"
elif [ $percentage -ge 50 ]; then
    class="Second Class"
elif [ $percentage -ge 40 ]; then
    class="Pass"
else
    class="Fail"
fi

echo "Total Marks = $total"
echo "Percentage = $percentage%"
echo "Class Obtained = $class"
```

Output:-

```
Provisioning the new WSL instance Ubuntu
This might take a while...
Create a default Unix user account: himani
New password:
Retype new password:
passwd: password updated successfully
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.

himani@DELL:~$ mkdir Shell_Practical
himani@DELL:~$ cd Shell_Practical
himani@DELL:~/Shell_Practical$ nano marksheet.sh
himani@DELL:~/Shell_Practical$ chmod +x marksheet.sh
himani@DELL:~/Shell_Practical$ ./marksheet.sh
Enter marks of Subject 1:
70
Enter marks of Subject 2:
78
Enter marks of Subject 3:
90
Total Marks = 238
Percentage = 79%
Class Obtained = Distinction
himani@DELL:~/Shell_Practical$
```

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

Code:-

```
  GNU nano 7.2                          file_menu.sh *
#!/bin/bash

echo "1. Display Calendar of current month"
echo "2. Display today's date and time"
echo "3. Display logged-in users"
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
```

Output:-

```
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
2
Mon Jan 19 15:59:54 UTC 2026
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
1
./file_menu.sh: line 11: cal: command not found
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
3
himani    pts/1         2026-01-19 14:58
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
4
/dev/pts/0
himani@DELL:~/Shell_Practical$
```

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

Code:-

```
  GNU nano 7.2                          fibonacci.sh
#!/bin/bash

echo "Enter number of terms:"
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
```

Output:-

```
himani@DELL:~/Shell_Practical$ nano fibonacci.sh
himani@DELL:~/Shell_Practical$ chmod +x fibonacci.sh
himani@DELL:~/Shell_Practical$ ./fibonacci.sh
Enter number of terms:
4
Fibonacci Series:
1 1 2 3
himani@DELL:~/Shell_Practical$ 
```

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

Code:-

```
  GNU nano 7.2                              prime.sh *
#!/bin/bash

echo "Enter value of n:"
read n

count=0
num=2

echo "Prime numbers are:"
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
```

Output:-

```
himani@DELL:~/Shell_Practical$ nano prime.sh
himani@DELL:~/Shell_Practical$ chmod +x prime.sh
himani@DELL:~/Shell_Practical$ ./prime.sh
Enter value of n:
4
Prime numbers are:
2 3 5 7
himani@DELL:~/Shell_Practical$
```

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

Code:-

```
  GNU nano 7.2                    file_menu.sh *
#!/bin/bash


echo "1. Display Calendar of current month"
echo "2. Display today's date and time"
echo "3. Display logged-in users"
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
```

Output:-

```
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
2
Mon Jan 19 15:59:54 UTC 2026
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
1
./file_menu.sh: line 11: cal: command not found
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
3
himani    pts/1        2026-01-19 14:58
himani@DELL:~/Shell_Practical$ chmod +x file_menu.sh
himani@DELL:~/Shell_Practical$ ./file_menu.sh
1. Display Calendar of current month
2. Display today's date and time
3. Display logged-in users
4. Display terminal number
Enter your choice:
4
/dev/pts/0
himani@DELL:~/Shell_Practical$
```