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:-

```
MINGW64:/c/Users/sejal sarode/OS_Practical_3
  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))

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:-

```
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ nano marksheet.sh

sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x marksheet.sh
./marksheet.sh
Enter marks of Subject 1:
80
Enter marks of Subject 2:
50
Enter marks of Subject 3:
75
Total Marks = 205
Percentage = 68%
Class Obtained = First Class
```

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:-

MINGW64:/c/Users/sejal sarode/OS_Practical_3

```
GNU nano 8.7
#!/bin/bash
echo "1. Display Calendar"
echo "2. Display Date and Time"
echo "3. Display Logged Users"
echo "4. Display Terminal Number"
read ch

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

Output:-

```
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x menu.sh
./menu.sh
1. Display Calendar
2. Display Date and Time
3. Display Logged Users
4. Display Terminal Number
2
Tue Jan 20 22:26:28 IST 2026

sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x menu.sh

sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ ./menu.sh
1. Display Calendar
2. Display Date and Time
3. Display Logged Users
4. Display Terminal Number
3

sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ ./menu.sh
1. Display Calendar
2. Display Date and Time
3. Display Logged Users
4. Display Terminal Number
1
```

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

Code:-

```
MINGW64:/c/Users/sejal sarode/OS_Practical_3

GNU nano 8.7
#!/bin/bash
echo "Enter n:"
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
```

Output:-

```
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x fibo.sh
./fibo.sh
Enter n:
5
Fibonacci Series:
0 1 1 2 3
```

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

Code:-

MINGW64:/c/Users/sejal sarode/OS_Practical_3

```bash
#!/bin/bash
echo "Enter n:"
read n
count=0
num=2
echo "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
```

Output:-

```
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x prime.sh
./prime.sh
Enter n:
6
Prime Numbers:
2 3 5 7 11 13
```

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

Code:

```bash
#!/bin/bash
echo "1. Create File"
echo "2. Write File"
echo "3. Append File"
echo "4. Delete File"
read ch
echo "Enter filename:"
read fname

case $ch in
1)  touch $fname ;;
2)  cat > $fname ;;
3)  cat >> $fname ;;
4)  rm $fname ;;
*)  echo "Invalid choice" ;;
esac
```

Output:-

```
sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ chmod +x filemenu.sh
./filemenu.sh
1. Create File
2. Write File
3. Append File
4. Delete File
1
Enter filename:
sejal_os

sejal sarode@INBOOK_X2_SLIM MINGW64 ~/OS_Practical_3
$ ./filemenu.sh
1. Create File
2. Write File
3. Append File
4. Delete File
2
Enter filename:
sejal
i am in 2nd year
```