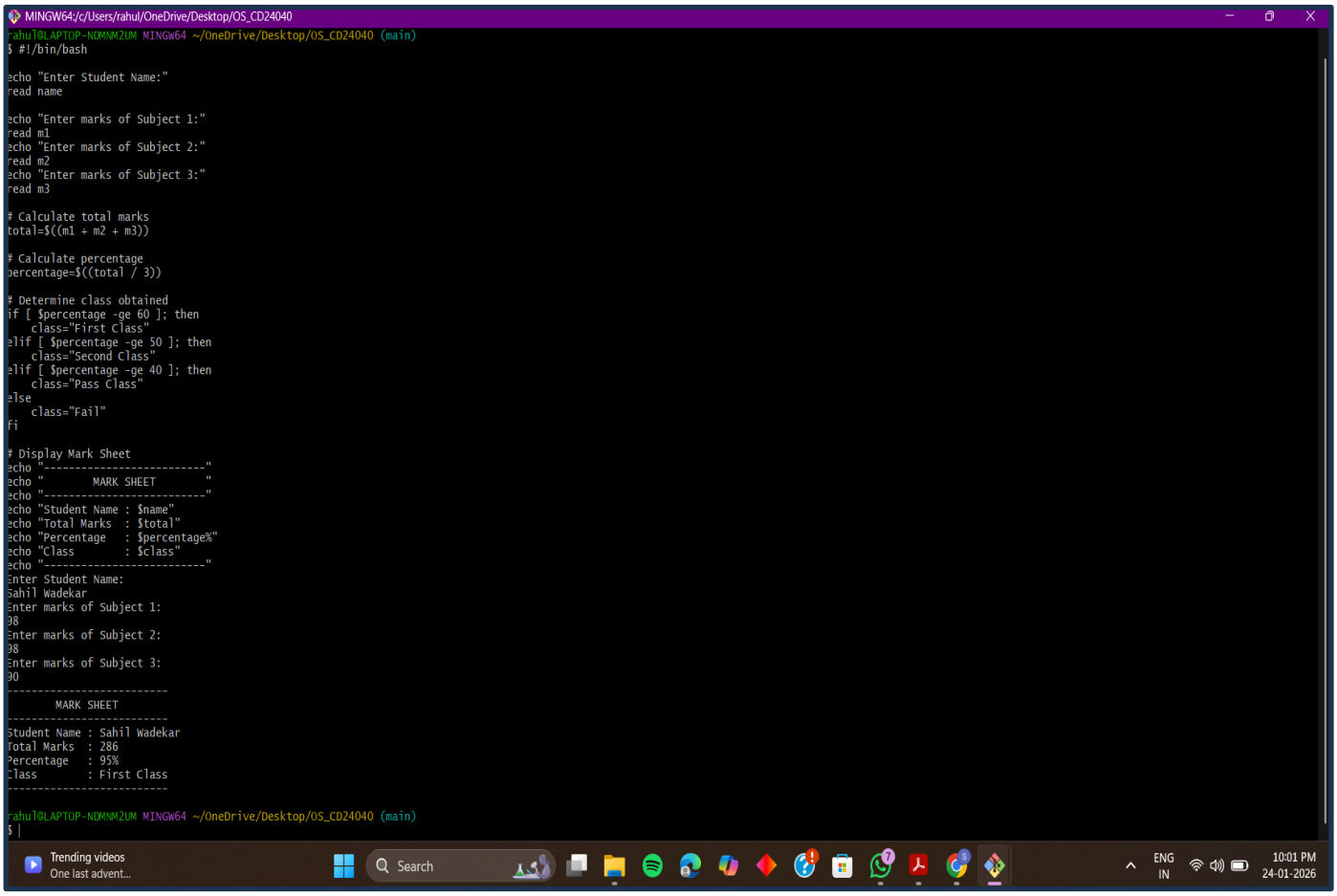
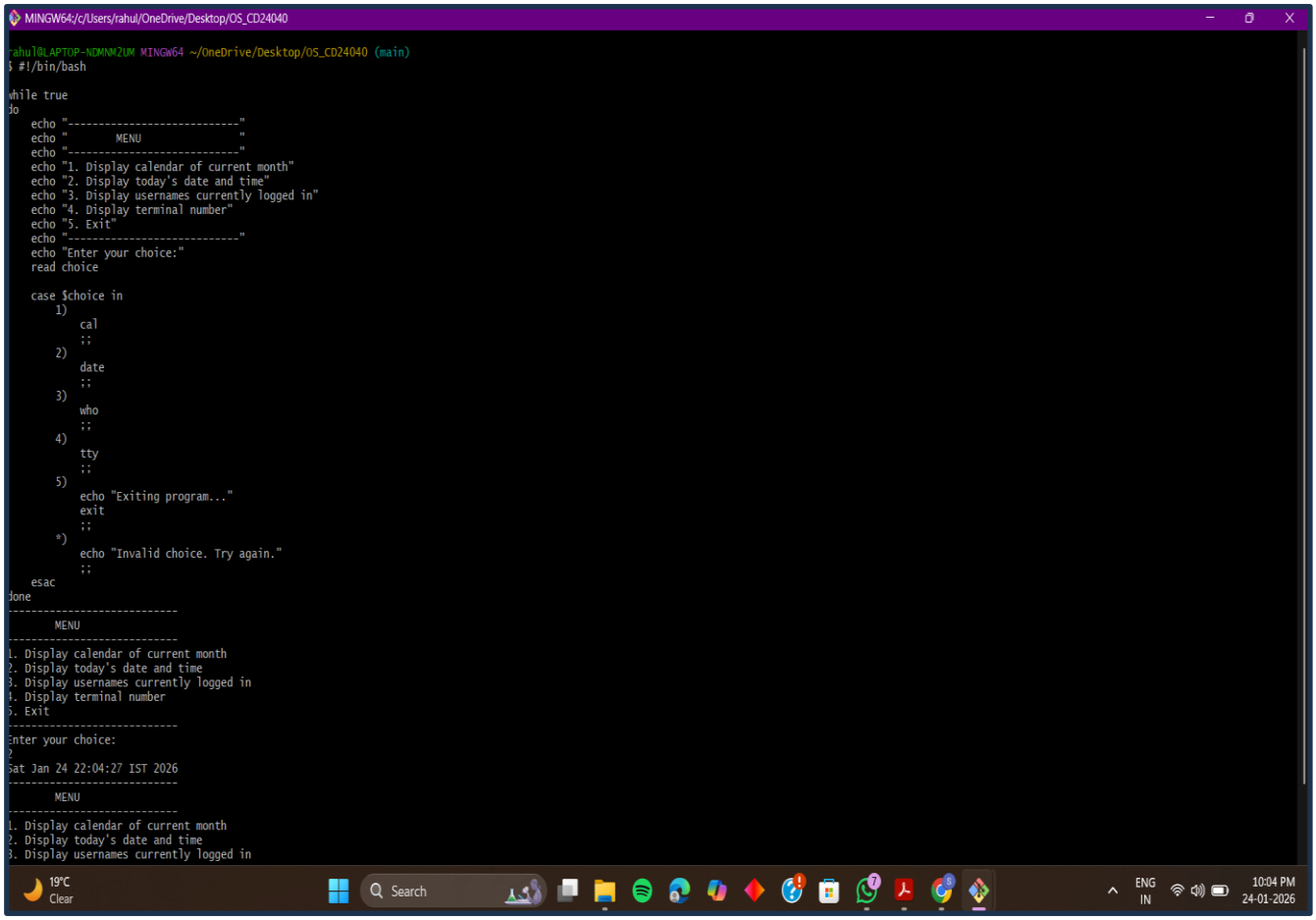
1. Write a shell script to generate mark- sheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.



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



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

MINGW64:/c/Users/rahul/OneDrive/Desktop/OS_CD24040

```
rahul@LAPTOP-NDMNM2UM MINGW64 ~/OneDrive/Desktop/OS_CD24040 (main)
$ #!/bin/bash

echo "Enter value of n:"
read n

a=1
b=1

echo "Fibonacci Series:"
echo -n "$a $b "

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

echo
Enter value of n:
6
Fibonacci Series:
1 1 2 3 5 8

rahul@LAPTOP-NDMNM2UM MINGW64 ~/OneDrive/Desktop/OS_CD24040 (main)
$
```

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

MINGW64:/c/Users/rahul/OneDrive/Desktop/OS_CD24040

```
rahul@LAPTOP-NDMNM2UM MINGW64 ~/OneDrive/Desktop/OS_CD24040 (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=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 value of n:
5
First 5 Prime Numbers:
2 3 5 7 11

rahul@LAPTOP-NDMNM2UM MINGW64 ~/OneDrive/Desktop/OS_CD24040 (main)
$
```

5. Write menu driven program for file handling activity

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

```
rahul@LAPTOP-NDMNM2UM MINGW64 ~/OneDrive/Desktop/OS_CD24040 (main)
$ #!/bin/bash

echo "Enter file name:"
read filename

while true
do
    echo "------------------------------"
    echo "     FILE HANDLING MENU       "
    echo "------------------------------"
    echo "1. Create File"
    echo "2. Write Content to File"
    echo "3. Append File Content"
    echo "4. Delete File Content"
    echo "5. Exit"
    echo "------------------------------"
    echo "Enter your choice:"
    read choice

    case $choice in
        1)
            touch $filename
            echo "File created successfully."
            ;;
        2)
            echo "Enter content (Press CTRL+D to save):"
            cat > $filename
            ;;
        3)
            echo "Enter content to append (Press CTRL+D to save):"
            cat >> $filename
            ;;
        4)
            > $filename
            echo "File content deleted."
            ;;
        5)
            echo "Exiting program..."
            exit
            ;;
        *)
            echo "Invalid choice. Try again."
```

```
done
Enter file name:
Sahil
------------------------------
     FILE HANDLING MENU
------------------------------
1. Create File
2. Write Content to File
3. Append File Content
4. Delete File Content
5. Exit
------------------------------
Enter your choice:
1
File created successfully.
------------------------------
     FILE HANDLING MENU
------------------------------
1. Create File
2. Write Content to File
3. Append File Content
4. Delete File Content
5. Exit
------------------------------
Enter your choice:
2
Enter content (Press CTRL+D to save):
CD24040
------------------------------
     FILE HANDLING MENU
------------------------------
1. Create File
2. Write Content to File
3. Append File Content
4. Delete File Content
5. Exit
------------------------------
Enter your choice:
Invalid choice. Try again.
------------------------------
     FILE HANDLING MENU
------------------------------
1. Create File
2. Write Content to File
3. Append File Content
4. Delete File Content
5. Exit
------------------------------
Enter your choice:
Invalid choice. Try again.
------------------------------
     FILE HANDLING MENU
------------------------------
1. Create File
2. Write Content to File
3. Append File Content
4. Delete File Content
```