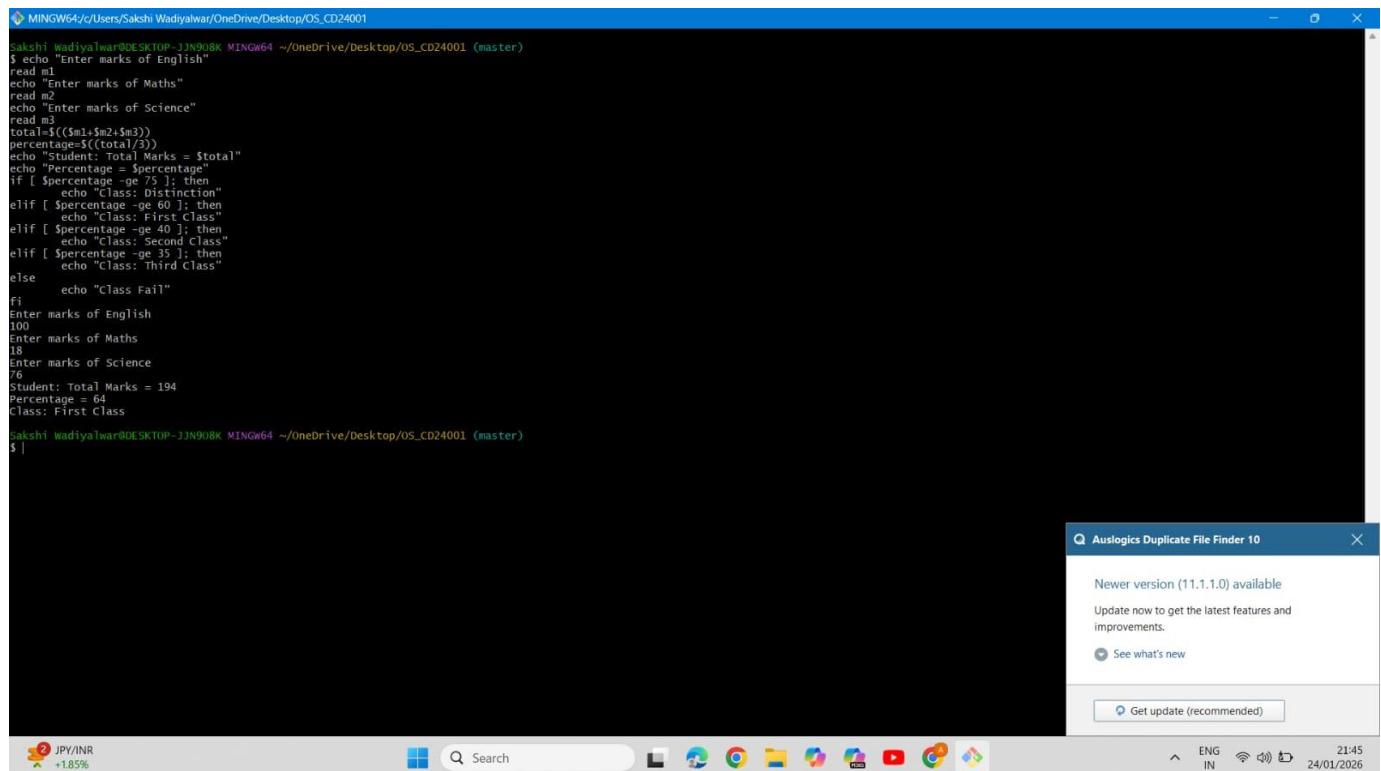


1. Write a shell script to generate mark – sheet of a student. Take 3 subjects, calculate and display total marks, percentage and Class obtained by the student.



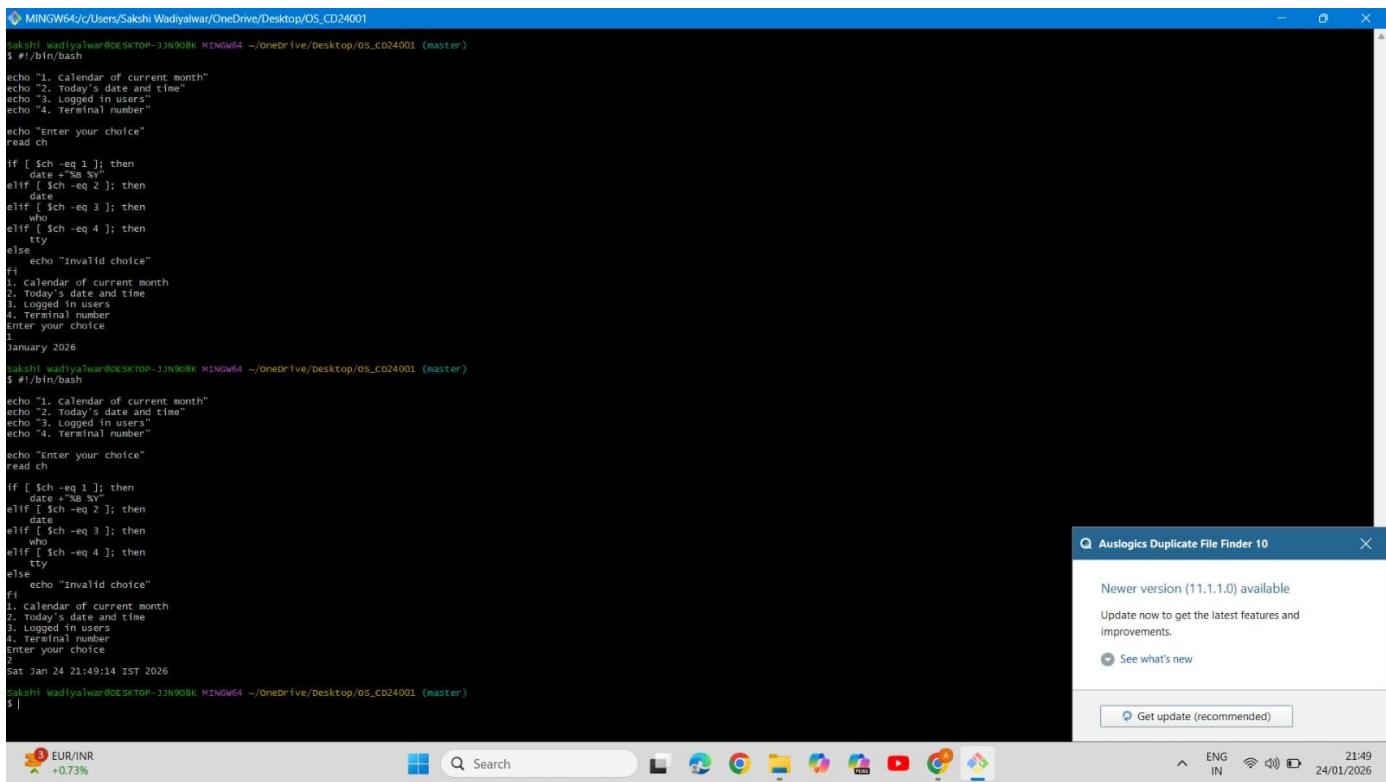
The screenshot shows a Windows desktop environment. In the center, there is a terminal window titled "MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)". The terminal displays a shell script for calculating student marks. The script prompts for three subjects (English, Maths, Science), calculates total marks and percentage, and determines the class based on the percentage. The output shows a total of 194 marks, a percentage of 64, and a class of "First Class".

```
sakshi wadiyalwar@DESKTOP-3JN908K MINGW64 ~/OneDrive/Desktop/OS_CD24001 (master)
$ echo "Enter marks of English"
read m1
echo "Enter marks of Maths"
read m2
echo "Enter marks of Science"
read m3
total=$((m1+m2+m3))
percentage=$((total/3))
echo "Student: Total Marks = $total"
echo "Percentage = $percentage"
if [ $percentage -ge 75 ]; then
    echo "Class: Distinction"
elif [ $percentage -ge 60 ]; then
    echo "Class: First Class"
elif [ $percentage -ge 40 ]; then
    echo "Class: Second Class"
elif [ $percentage -ge 35 ]; then
    echo "Class: Third Class"
else
    echo "Class Fail"
fi
Enter marks of English
64
Enter marks of Maths
18
Enter marks of Science
76
student: Total Marks = 194
Percentage = 64
Class: First Class
$ |
```

At the bottom of the screen, the taskbar shows various icons for applications like File Explorer, Edge, and Google Chrome. A system tray icon for "JPY/INR +1.85%" is visible. On the right side, the system tray displays language settings (ENG IN), a battery icon, and the date and time (24/01/2026 21:45). A notification from "Auslogics Duplicate File Finder 10" is also present, prompting for an update.

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

- i. Display calendar of current month
- ii. Display today's date and time
- iii. Display usernames those are currently logged in the system
- iv. Display your terminal number



The screenshot shows a Windows desktop environment. In the center is a terminal window titled 'MINGW64/c/Users/Sakshi_Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)'. The terminal displays a menu-driven shell script. The script asks for a choice (1-4) and then executes one of four commands: displaying the calendar, the date and time, a list of logged-in users, or the terminal number. The output shows the calendar for January 2026 and the date as Saturday, Jan 24, 2026. In the bottom right corner of the screen, there is a system tray notification from 'Auslogics Duplicate File Finder 10' with a message about a newer version available.

```
MINGW64/c/Users/Sakshi_Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)
$ #!/bin/bash
echo "1. Calendar of current month"
echo "2. Today's date and time"
echo "3. Logged in users"
echo "4. Terminal number"
echo "Enter your choice"
read ch
if [ $ch -eq 1 ]; then
    date +%B %Y
elif [ $ch -eq 2 ]; then
    date
elif [ $ch -eq 3 ]; then
    who
elif [ $ch -eq 4 ]; then
    tty
else
    echo "Invalid choice"
fi
1. Calendar of current month
2. Today's date and time
3. Logged in users
4. Terminal number
Enter your choice
1
January 2026
MINGW64/c/Users/Sakshi_Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)
$ #!/bin/bash
echo "1. Calendar of current month"
echo "2. Today's date and time"
echo "3. Logged in users"
echo "4. Terminal number"
echo "Enter your choice"
read ch
if [ $ch -eq 1 ]; then
    date +%B %Y
elif [ $ch -eq 2 ]; then
    date
elif [ $ch -eq 3 ]; then
    who
elif [ $ch -eq 4 ]; then
    tty
else
    echo "Invalid choice"
fi
1. Calendar of current month
2. Today's date and time
3. Logged in users
4. Terminal number
Enter your choice
2
Sat Jan 24 21:49:14 IST 2026
MINGW64/c/Users/Sakshi_Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)
$ |
```

3. Write a shell script which will generate first n fibonacci numbers like: 1, 1.2,3,5,13

```
MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001
$ #!/bin/bash
echo "Enter how many Fibonacci numbers you want"
read n
a=1
b=1
echo "Fibonacci Series:"
if [ "$n" -ge 1 ]; then
    printf "%d\n", $a
fi
if [ "$n" -ge 2 ]; then
    printf "%d\n", $b
fi
for (( i=3; i<=n; i++ ))
do
    c=$((a + b))
    printf "%d\n", $c
    a=$b
    b=$c
done
echo "Enter how many Fibonacci numbers you want"
$ 5
Fibonacci Series:
1 1 2 3 5
Sakshi wadiyalwar@DESKTOP-JJN90BK MINGW64 ~/OneDrive/Desktop/OS_CD24001 (master)
$
```

The screenshot shows a terminal window on a Windows 10 desktop. The taskbar at the bottom includes icons for File Explorer, Edge, Google Chrome, FileZilla, and others. The system tray shows the date (24/01/2026), time (22:16), battery level (19%), and network status (ENG IN).

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

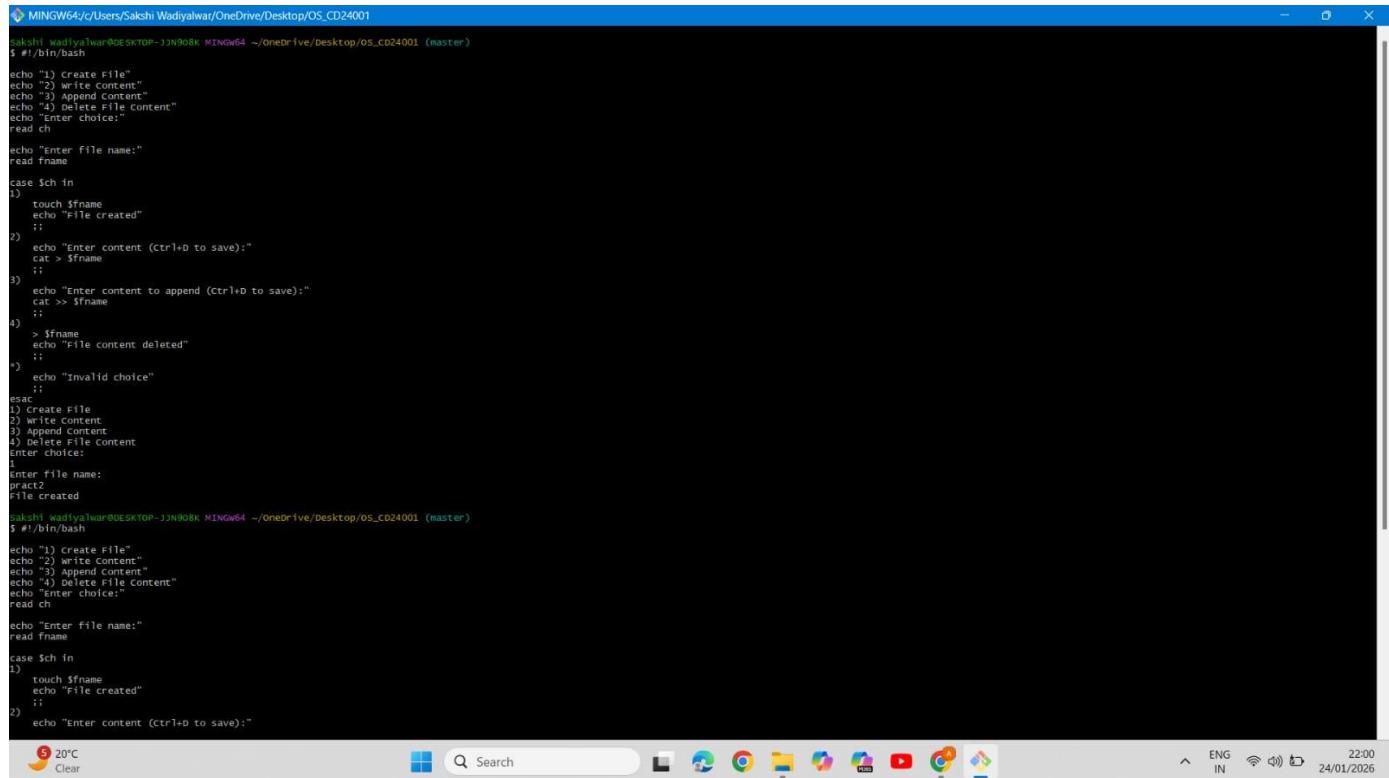
```
MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001
$ #!/bin/bash
echo "Enter the value of n"
read n
count=0
num=2
echo "First $n prime numbers are:"
while [ $count -lt $n ]
do
    flag=0
    for (( i=2; i<num/2; i++ ))
    do
        if [ $((num % i)) -eq 0 ]; then
            flag=1
            break
        fi
    done
    if [ $flag -eq 0 ]; then
        echo $num
        count=$((count + 1))
    fi
    num=$((num + 1))
done
echo
echo "Enter the value of n"
$ 5
First 5 prime numbers are:
2 3 5 7 11
Sakshi wadiyalwar@DESKTOP-JJN90BK MINGW64 ~/OneDrive/Desktop/OS_CD24001 (master)
$
```

A notification from Auslogics Duplicate File Finder 10 is visible in the top right corner, prompting an update to version 11.1.1.0.

The taskbar at the bottom includes icons for File Explorer, Edge, Google Chrome, FileZilla, and others. The system tray shows the date (21/01/2021), time (21:51), battery level (JPY/INR +1.85%), and network status (ENG IN).

5. Write menu driven program for file handling activity

- i. Creation of file
- ii. Write content in the file
- iii. Upend file content
- iv. Delete file content



The screenshot shows a Windows desktop environment with a terminal window open in a MinGW64 shell. The terminal displays a bash script for file handling. The script includes a menu with four options: Create File, Write Content, Append Content, and Delete File Content. It prompts the user to enter a choice and a file name, then performs the corresponding operation based on the choice. The terminal window has a blue header bar with the path 'MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001' and the title '(master)'. The taskbar at the bottom shows various application icons, and the system tray indicates the date as 24/01/2026.

```
MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)
$ #!/bin/bash
echo "1) Create File"
echo "2) Write Content"
echo "3) Append Content"
echo "4) Delete File Content"
echo "Enter choice:"
read ch
echo "Enter file name:"
read fname
case $ch in
1) touch $fname
   echo "File created"
   ;;
2) echo "Enter content (Ctrl+D to save):"
   cat > $fname
   ;;
3) echo "Enter content to append (Ctrl+D to save):"
   cat >> $fname
   ;;
4) > $fname
   echo "File content deleted"
   ;;
*) echo "invalid choice"
   ;;
esac
1) Create File
2) Write Content
3) Append Content
4) Delete File Content
Enter choice:
Enter file name:
pract2
File created
MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001 (master)
$ #!/bin/bash
echo "1) Create File"
echo "2) Write Content"
echo "3) Append Content"
echo "4) Delete File Content"
echo "Enter choice:"
read ch
echo "Enter file name:"
read fname
case $ch in
1) touch $fname
   echo "File created"
   ;;
2) echo "Enter content (Ctrl+D to save):"
   cat > $fname
   ;;
3) echo "Enter content to append (Ctrl+D to save):"
   cat >> $fname
   ;;
4) > $fname
   echo "File content deleted"
   ;;
*) echo "invalid choice"
   ;;
esac
```

```
MINGW64/c/Users/Sakshi Wadiyalwar/OneDrive/Desktop/OS_CD24001
;;
> $fname
echo "File content deleted"
;;
*)
echo "invalid choice"
;;
esac
1) Create File
2) write Content
3) Append Content
4) Delete File Content
Enter choice:
1
Enter file name:
pract2
File created
sakshi wadiyalwar@DESKTOP-JJN908K MINGW64 ~/OneDrive/Desktop/OS_CD24001 (master)
$ #!/bin/bash
echo "1) Create File"
echo "2) write Content"
echo "3) Append Content"
echo "4) Delete File Content"
echo "Enter choice:"
read ch
echo "Enter file name:"
read fname
case $ch in
1) touch $fname
echo "file created"
;;
2) echo "Enter content (ctrl+d to save):"
cat > $fname
;;
3) echo "Enter content to append (ctrl+d to save):"
cat >> $fname
;;
4) > $fname
echo "file content deleted"
;;
*)
echo "invalid choice"
;;
esac
1) Create File
2) write Content
3) Append Content
4) Delete File Content
Enter choice:
2
Enter file name:
hey i am aayush!
sakshi wadiyalwar@DESKTOP-JJN908K MINGW64 ~/OneDrive/Desktop/OS_CD24001 (master)
$ |
```

20°C

Clear

Search



ENG IN 22:00
24/01/2026

