

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.

```
MINGW64:/c/Users/acom/Desktop/OS_CD24037
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$ 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
60
Enter marks of Maths
70
Enter marks of Science
50
Student: Total Marks = 180
Percentage = 60
Class: First Class
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$
```

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

```
MINGW64:/c/Users/acom/Desktop/OS_CD24037
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$#!/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

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$#!/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 18:55:50 IST 2026

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$
```

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

```
MINGW64:/c/Users/acom/Desktop/OS_CD24037
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$#!/bin/bash

echo "Enter how many Fibonacci numbers you want"
read n

a=1
b=1

echo "Fibonacci series:"

if [ "$n" -ge 1 ]; then
    printf "%d " "$a"
fi

if [ "$n" -ge 2 ]; then
    printf "%d " "$b"
fi

for (( i=3; i<=n; i++ ))
do
    c=$((a + b))
    printf "%d " "$c"
    a=$b
    b=$c
done

echo
Enter how many Fibonacci numbers you want
5
Fibonacci Series:
1 1 2 3 5

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$ |
```

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

```
MINGW64:/c/Users/acom/Desktop/OS_CD24037
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$#!/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 [ $flag -eq 0 ]; then
        echo -n "$num "
        count=$((count + 1))
    fi

    num=$((num + 1))
done

echo
Enter the value of n
3
First 3 prime numbers are:
2 3 5

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$ |
```

**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

```
MINGW64:/c/Users/acom/Desktop/OS_CD24037
acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$#!/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:
1
Enter file name:
pract2
File created
```

```

MINGW64:/c/Users/acom/Desktop/OS_CD24037
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:
1
Enter file name:
pract2
File created

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$ #!/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:
pract2
Enter content (ctrl+D to save):
Hey, have a nice day!!

acom@DESKTOP-50T9G9Q MINGW64 ~/Desktop/OS_CD24037 (main)
$ |

```



