

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

```
CLANGARM64:/c/Users/athar/OneDrive/Desktop
athar@THOR CLANGARM64 ~/OneDrive/Desktop
$ 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
70
Enter marks of Maths
67
Enter marks of Science
77
Student: Total Marks = 214
Percentage = 71
Class: 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**

○

```
CLANGARM64:/c/Users/athar/OneDrive/Desktop
athar@THOR CLANGARM64 ~/OneDrive/Desktop
$ echo "1. Display calendar of current month"
echo "2. Display today's date and time"
echo "3. Display logged in usernames"
echo "4. Display terminal number"
echo "Enter your choice:"
read choice

case $choice in
1)
    echo "Current Month:"
    date +"%B %Y" ;;
2)
    date ;;
3)
    who ;;
4)
    tty ;;
*) 
    echo "Invalid choice" ;;
esac
1. Display calendar of current month
2. Display today's date and time
3. Display logged in usernames
4. Display terminal number
Enter your choice:
2
Sat Jan 24 20:19:33 IST 2026
```

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

```
CLANGARM64:/c/Users/athar/OneDrive/Desktop
athar@THOR CLANGARM64 ~/OneDrive/Desktop
$ echo "Enter number of terms:"
read n

a=0
b=1

echo "Fibonacci Series:"
for (( i=1; i<=n; i++ ))
do
    echo -n "$a "
    fn=$((a + b))
    a=$b
    b=$fn
done
echo
Enter number of terms:
7
Fibonacci Series:
0 1 1 2 3 5 8

athar@THOR CLANGARM64 ~/OneDrive/Desktop
$
```

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

```
CLANGARM64:/c/Users/athar/OneDrive/Desktop
athar@THOR CLANGARM64 ~/OneDrive/Desktop
$ echo "Enter number of prime numbers:"
read n

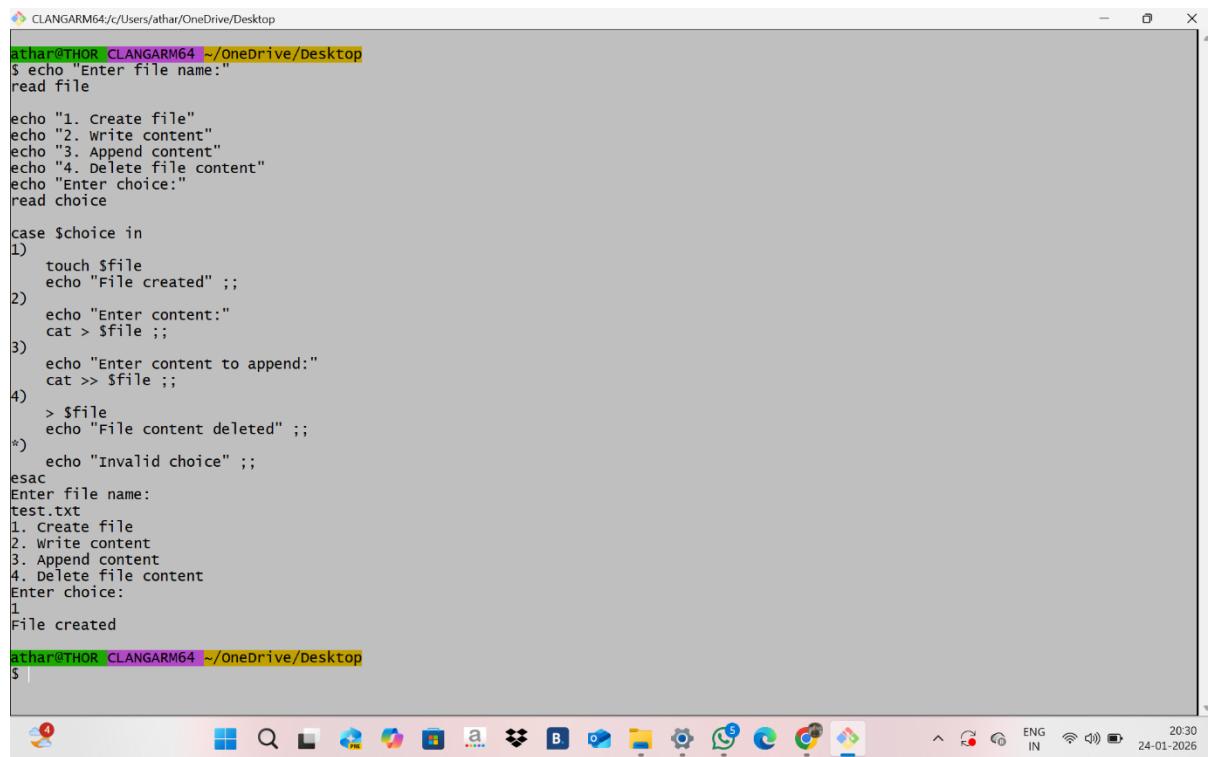
count=0
num=2

echo "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 number of prime numbers:
7
Prime Numbers:
2 3 5 7 11 13 17

athar@THOR CLANGARM64 ~/OneDrive/Desktop
$
```

5. Write menu driven program for file handling activity

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



The screenshot shows a terminal window titled 'CLANGARM64:c/Users/athar/OneDrive/Desktop'. The window contains the following text:

```
athar@THOR CLANGARM64 ~/OneDrive/Desktop
$ echo "Enter file name:"
read file

echo "1. Create file"
echo "2. Write content"
echo "3. Append content"
echo "4. Delete file content"
echo "Enter choice:"
read choice

case $choice in
1)
    touch $file
    echo "File created" ;;
2)
    echo "Enter content:"
    cat > $file ;;
3)
    echo "Enter content to append:"
    cat >> $file ;;
4)
    > $file
    echo "File content deleted" ;;
*) 
    echo "Invalid choice" ;;
esac
Enter file name:
test.txt
1. Create file
2. Write content
3. Append content
4. Delete file content
Enter choice:
1
File created

athar@THOR CLANGARM64 ~/OneDrive/Desktop
$
```

The terminal window has a light gray background and a dark gray border. The command prompt is 'CLANGARM64:c/Users/athar/OneDrive/Desktop'. The text is white or black, and the terminal window is centered on the screen.

