

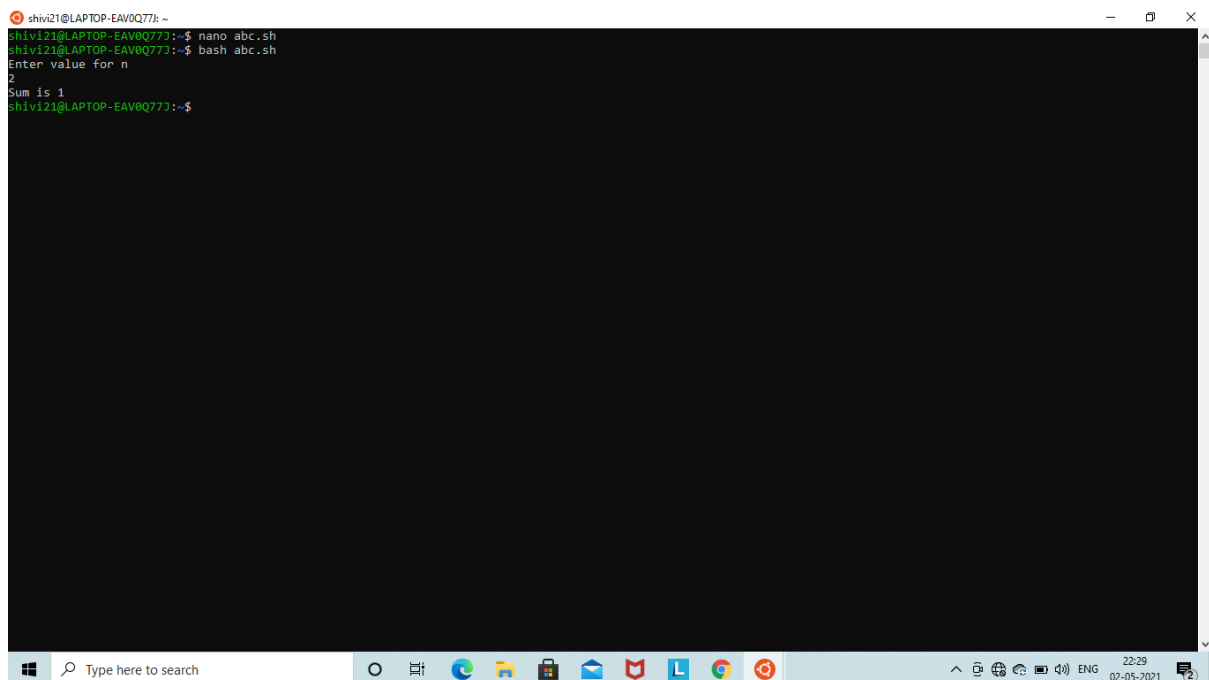
## EXPERIMENT - 6: SHELL PROGRAMMING

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1. Find the output of the following shell scripts

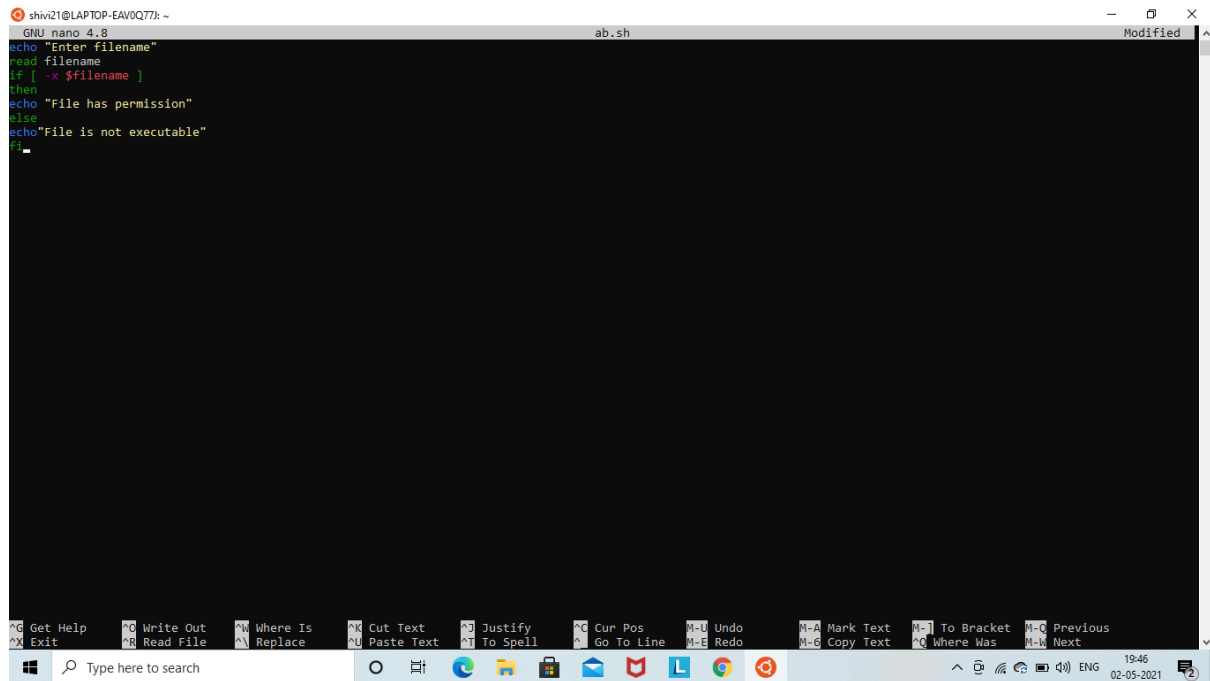
```
$ vi ex51
echo Enter value for n
read n
sum=0
i=1
while [ $i -le $n ]
do
sum=$((sum+i))
i=$((i+2))
done
echo Sum is $sum
```

Output:

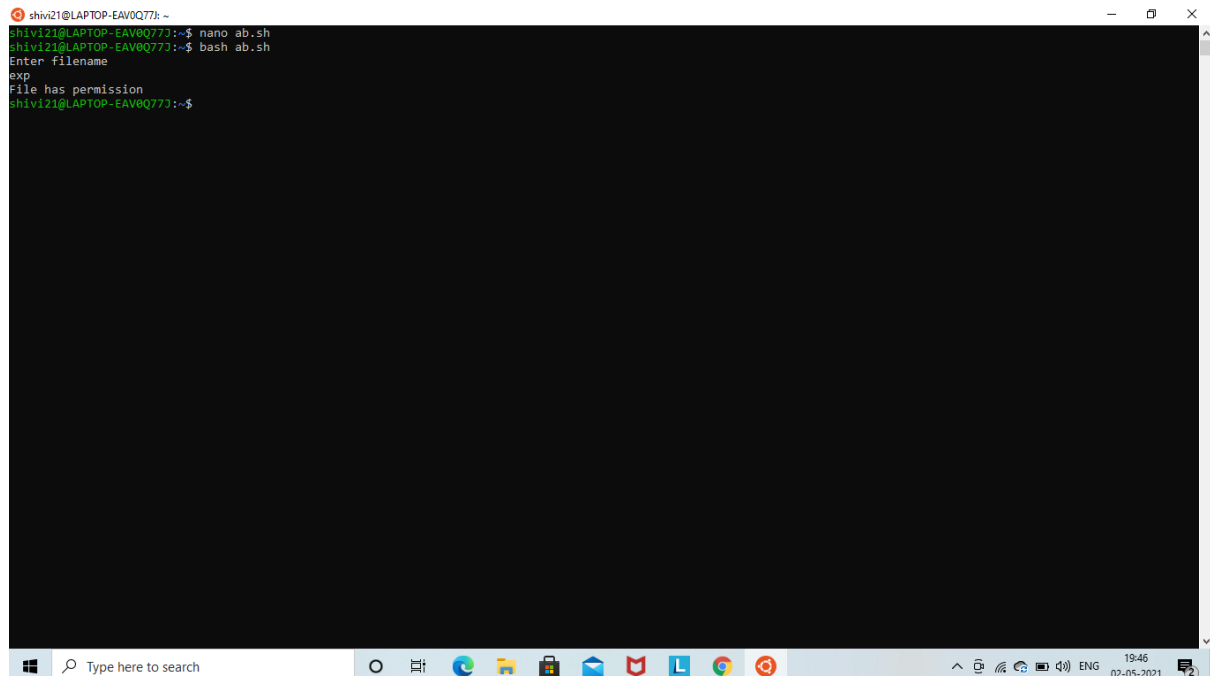
A screenshot of a Windows terminal window. The title bar shows 'shiv21@LAPTOP-EAV0Q77J: ~'. The terminal content shows the user creating a file 'abc.sh' with 'nano abc.sh', then running it with 'bash abc.sh'. The script prompts 'Enter value for n', and the user enters '2'. The script then outputs 'Sum is 1'. The terminal window has a standard Windows taskbar at the bottom with various application icons and system tray information showing the time as 22:29 on 02-05-2021.

```
shiv21@LAPTOP-EAV0Q77J: ~
shiv21@LAPTOP-EAV0Q77J:~$ nano abc.sh
shiv21@LAPTOP-EAV0Q77J:~$ bash abc.sh
Enter value for n
2
Sum is 1
shiv21@LAPTOP-EAV0Q77J:~$
```

2. Write a program to check whether the file has execute permission or not.  
If not, add the  
Permission.



```
shivi21@LAPTOP-EAV0Q77J: ~  
GNU nano 4.8  
ab.sh  
echo "Enter filename"  
read filename  
if [ -x $filename ]  
then  
echo "File has permission"  
else  
echo "File is not executable"  
fi  
_
```



```
shivi21@LAPTOP-EAV0Q77J: ~  
shivi21@LAPTOP-EAV0Q77J:~$ nano ab.sh  
shivi21@LAPTOP-EAV0Q77J:~$ bash ab.sh  
Enter filename  
exp  
File has permission  
shivi21@LAPTOP-EAV0Q77J:~$
```

Q3. Write a shell script to print a greeting as specified below.  
If hour is greater than or equal to 0 (midnight) and less than or equal to 11  
(up to 11:59:59),  
"Good morning" is displayed.

If hour is greater than or equal to 12 (noon) and less than or equal to 17 (up to 5:59:59

p.m.), "Good afternoon" is displayed.

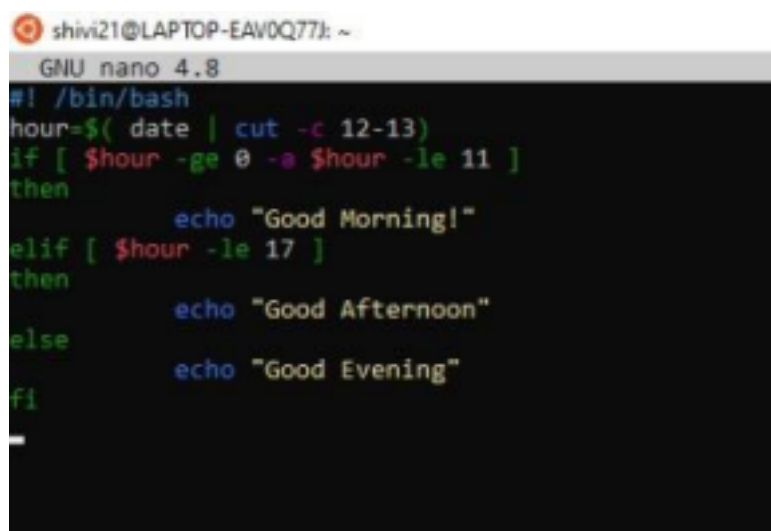
If neither of the preceding two conditions is satisfied, "Good evening" is displayed.

\$ vi ex53

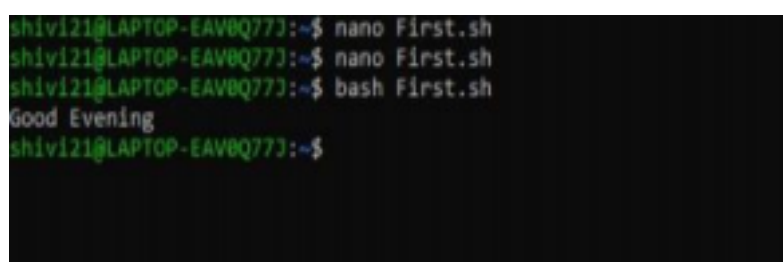
hour=\$(date | cut -c12-13)

if [ "\$hour" -ge 0 -a "\$hour" -le 11 ]

then



```
shivi21@LAPTOP-EAV0Q77J: ~
GNU nano 4.8
#!/bin/bash
hour=$( date | cut -c 12-13)
if [ $hour -ge 0 -a $hour -le 11 ]
then
    echo "Good Morning!"
elif [ $hour -le 17 ]
then
    echo "Good Afternoon"
else
    echo "Good Evening"
fi
```



```
shivi21@LAPTOP-EAV0Q77J:~$ nano First.sh
shivi21@LAPTOP-EAV0Q77J:~$ nano First.sh
shivi21@LAPTOP-EAV0Q77J:~$ bash First.sh
Good Evening
shivi21@LAPTOP-EAV0Q77J:~$
```

**Q4. Write a shell script to list only the name of sub directories in the present working Directory – Simple if .. fi statement.**

```
shivi21@LAPTOP-EAV0Q77J: ~
GNU nano 4.8
#!/bin/bash
for i in *
do
    if [ -d $i ]
    then
        echo $i
    fi
done
```

```
shivi21@LAPTOP-EAV0Q77J:~$ mkdir experiment
shivi21@LAPTOP-EAV0Q77J:~$ nano First.sh
shivi21@LAPTOP-EAV0Q77J:~$ bash First.sh
experiment
shivi21@LAPTOP-EAV0Q77J:~$
```

**Q5. Write a program to check all the files in the present working directory for a pattern**

**(passed through command line) and display the name of the file followed by a message**

**stating that the pattern is available or not available.**

```
shivi21@LAPTOP-EAV0Q77J: ~
GNU nano 4.8
q5.sh
for i in *
do
    if [ -f $i ]
    then
        grep $1 $i > /dev/null
        if [ $? -eq 0 ]
        then
            echo $i found
        else
            echo $i not found
        fi
    fi
done
```

