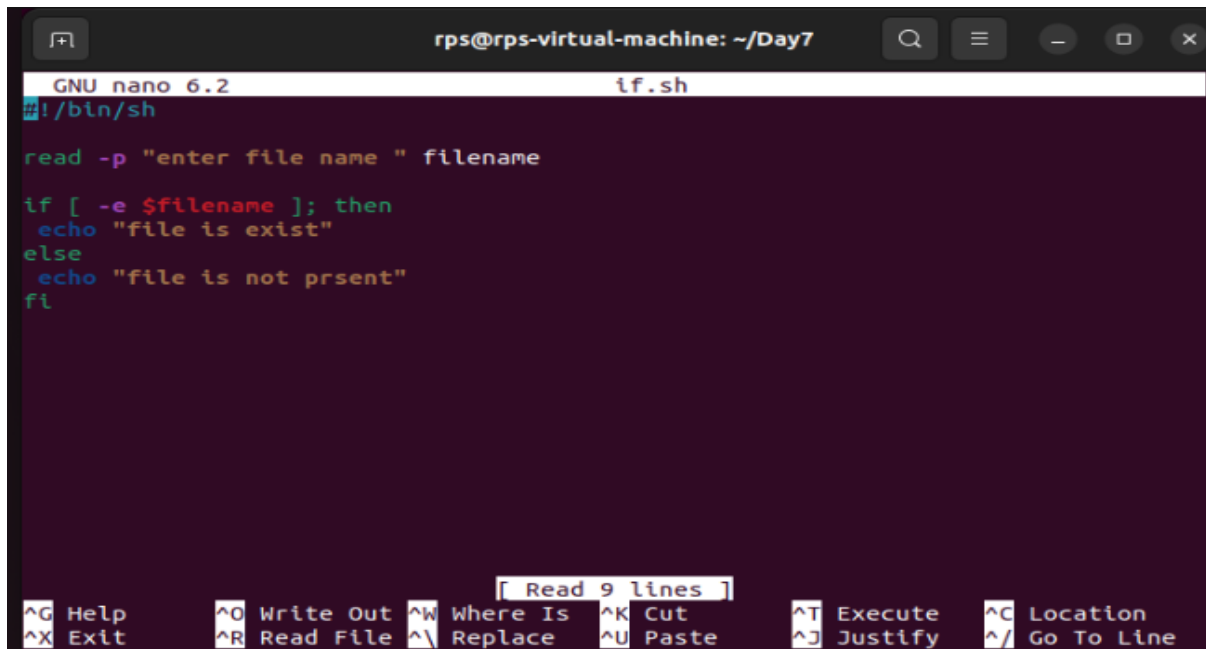


## Day\_7 - Shell Script Assignments

### Assignment 1:

Ensure the script checks if a specific file (e.g., myfile.txt) exists in the current directory. If it exists, print "File exists", otherwise print "File not found".

### Program –

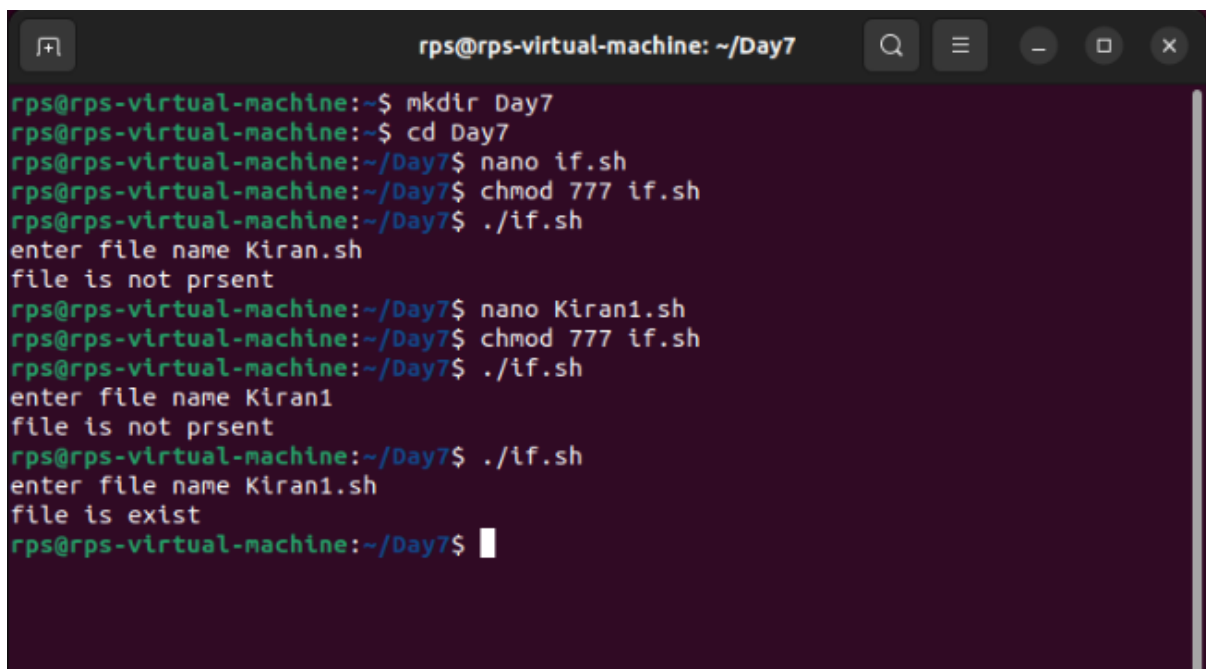


```
GNU nano 6.2 if.sh
#!/bin/sh

read -p "enter file name " filename

if [ -e $filename ]; then
    echo "file is exist"
else
    echo "file is not prsent"
fi
```

### Output –



```
rps@rps-virtual-machine: ~$ mkdir Day7
rps@rps-virtual-machine: ~$ cd Day7
rps@rps-virtual-machine: ~/Day7$ nano if.sh
rps@rps-virtual-machine: ~/Day7$ chmod 777 if.sh
rps@rps-virtual-machine: ~/Day7$ ./if.sh
enter file name Kiran.sh
file is not prsent
rps@rps-virtual-machine: ~/Day7$ nano Kiran1.sh
rps@rps-virtual-machine: ~/Day7$ chmod 777 if.sh
rps@rps-virtual-machine: ~/Day7$ ./if.sh
enter file name Kiran1
file is not prsent
rps@rps-virtual-machine: ~/Day7$ ./if.sh
enter file name Kiran1.sh
file is exist
rps@rps-virtual-machine: ~/Day7$
```

## Assignment 2:

Write a script that reads numbers from the user until they enter '0'. The script should also print whether each number is odd or even.

### Program –



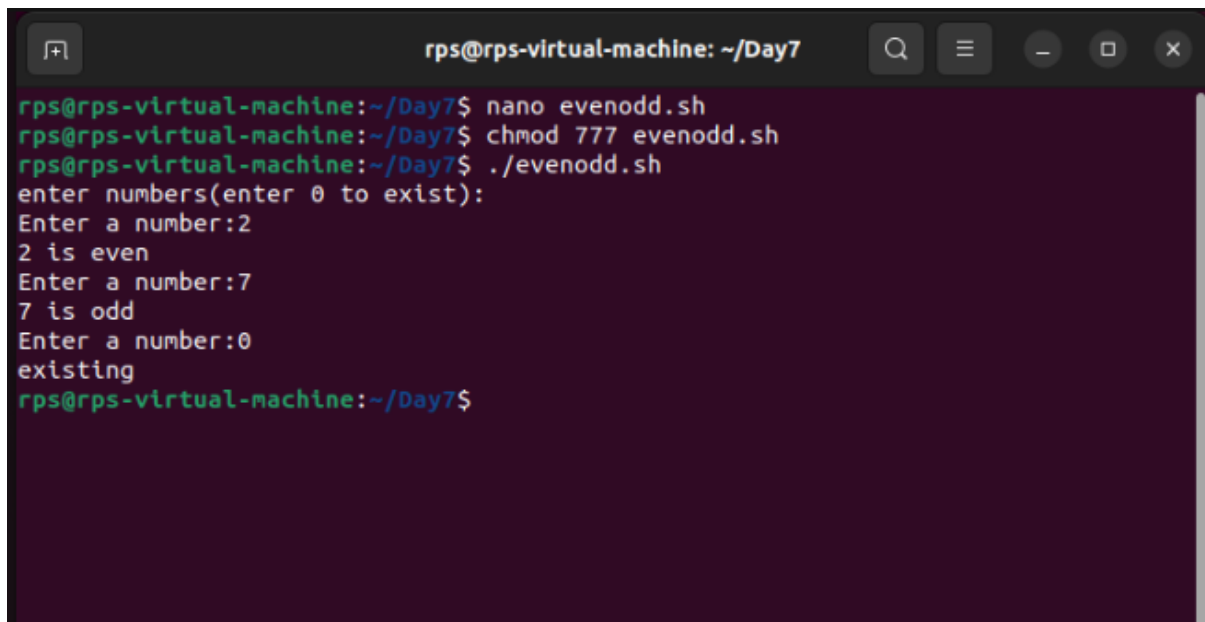
```
GNU nano 6.2 evenodd.sh
#!/bin/bash

echo "enter numbers(enter 0 to exist):"

while :
do
    read -p "Enter a number:" num
    if [ $num -eq 0 ]; then
        echo "existing"
        break
    fi

    if [ $((num % 2)) -eq 0 ]; then
        echo "$num is even"
    else
        echo "$num is odd"
    fi
done
```

### Output –

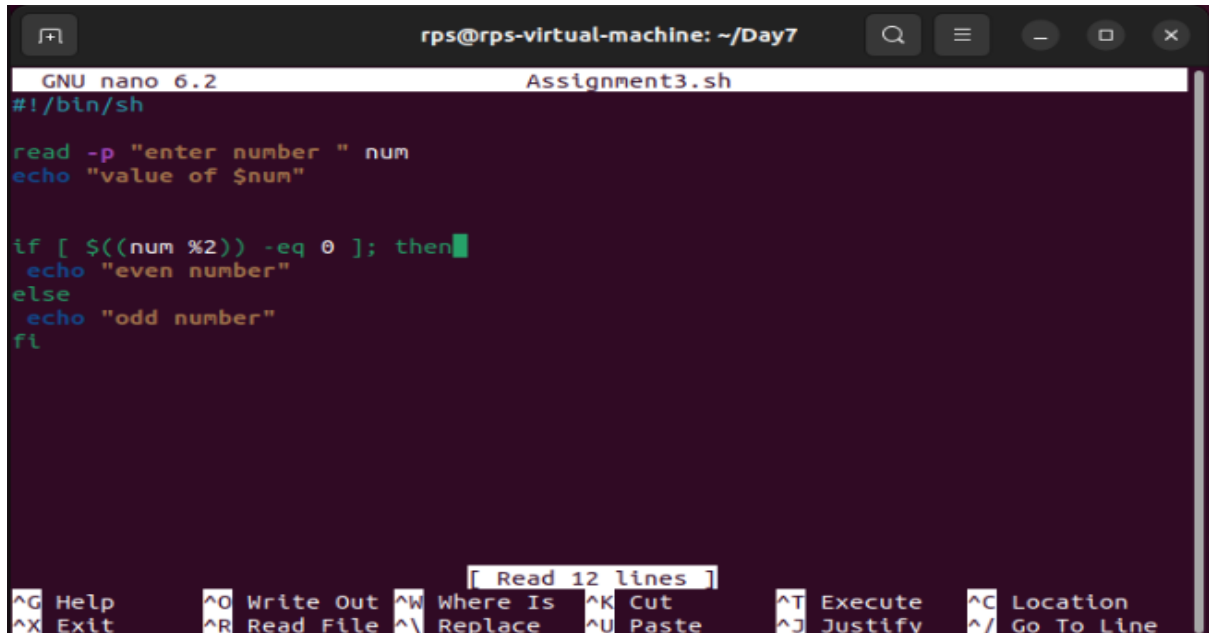


```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano evenodd.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 evenodd.sh
rps@rps-virtual-machine:~/Day7$ ./evenodd.sh
enter numbers(enter 0 to exist):
Enter a number:2
2 is even
Enter a number:7
7 is odd
Enter a number:0
existing
rps@rps-virtual-machine:~/Day7$
```

### Assignment 3 –

Take a user enter, display weather the even or odd.

### Program –



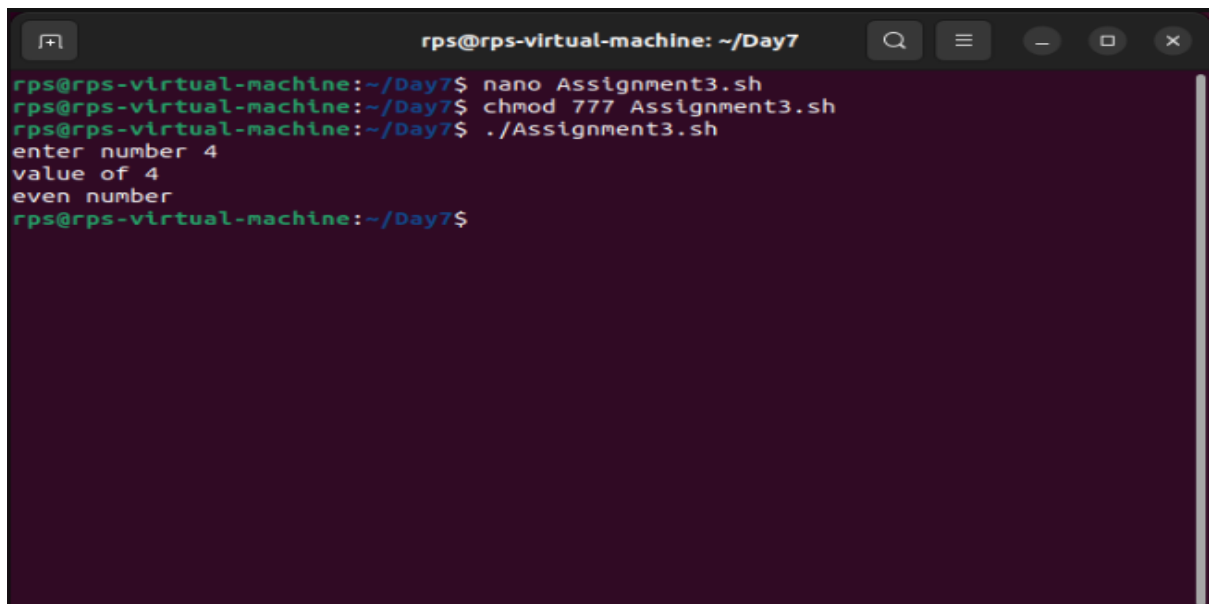
```
rps@rps-virtual-machine: ~/Day7
GNU nano 6.2 Assignment3.sh
#!/bin/sh

read -p "enter number " num
echo "value of $num"

if [ $((num %2)) -eq 0 ]; then
    echo "even number"
else
    echo "odd number"
fi

[ Read 12 lines ]
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

### Output –



```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano Assignment3.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 Assignment3.sh
rps@rps-virtual-machine:~/Day7$ ./Assignment3.sh
enter number 4
value of 4
even number
rps@rps-virtual-machine:~/Day7$
```

#### Assignment 4:

Count the number of directory and files in specific folder.

#### Program –

```
rps@rps-virtual-machine: ~/Day7
GNU nano 6.2 count.sh
#!/bin/sh
cd /home/rps

#count all the directory

c=0
for files in *
do
    if [ -d $files ]; then
        c=$((c+1))
    fi
done
echo "total number if directory prsent : $c"

#count all the files
a=0
for files in *
do
    if [ -e $files ]; then
        a=$((a+1))
    fi
done
echo "total number if files prsent : $a"
```

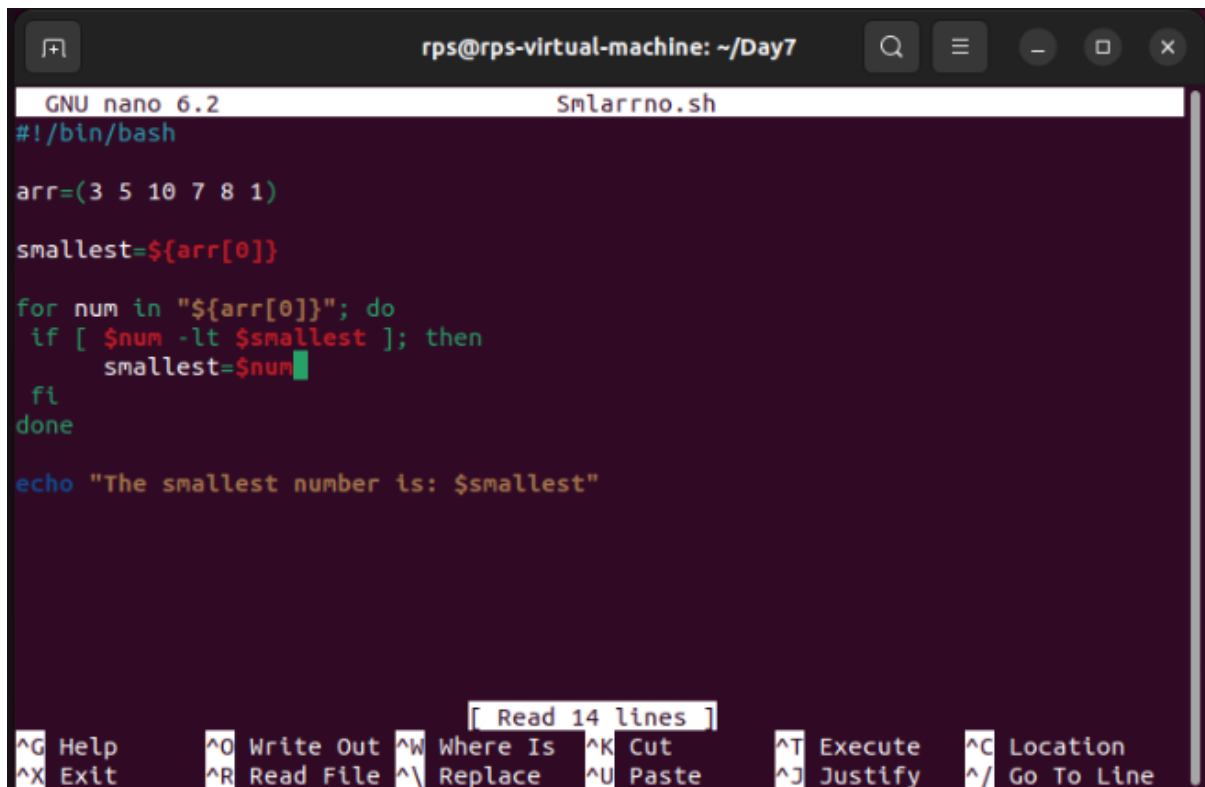
#### Output –

```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano count.sh
rps@rps-virtual-machine:~/Day7$ chmod count.sh
chmod: missing operand after 'count.sh'
Try 'chmod --help' for more information.
rps@rps-virtual-machine:~/Day7$ chmod 777 count.sh
rps@rps-virtual-machine:~/Day7$ ./count.sh
total number if directory prsent : 14
total number if files prsent :18
rps@rps-virtual-machine:~/Day7$
```

## Assignment 5 –

Find the smallest number from the array.

## Program –



```
GNU nano 6.2 Smlarrno.sh
#!/bin/bash

arr=(3 5 10 7 8 1)

smallest=${arr[0]}

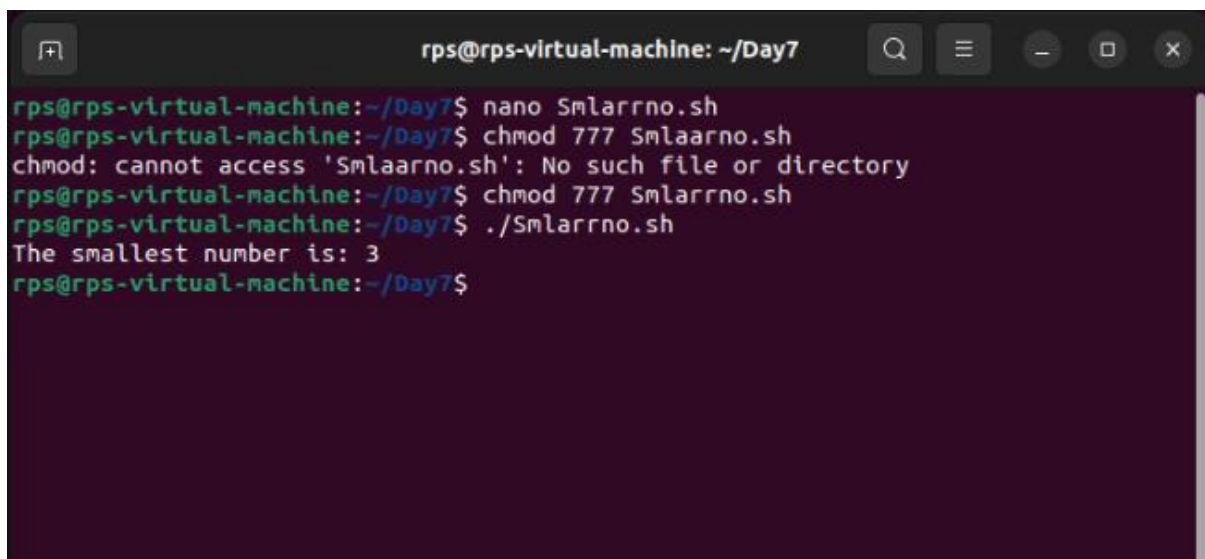
for num in "${arr[@]"; do
    if [ $num -lt $smallest ]; then
        smallest=$num
    fi
done

echo "The smallest number is: $smallest"
```

Read 14 lines

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^\ Replace	^U Paste	^J Justify	^_ Go To Line

## Output –



```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano Smlarrno.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 Smlaarno.sh
chmod: cannot access 'Smlaarno.sh': No such file or directory
rps@rps-virtual-machine:~/Day7$ chmod 777 Smlarrno.sh
rps@rps-virtual-machine:~/Day7$ ./Smlarrno.sh
The smallest number is: 3
rps@rps-virtual-machine:~/Day7$
```

## Assignment 6 –

Find the sum of the array.

### Program –



```
GNU nano 6.2 sumarray.sh
#!/bin/bash

arr=( 3 6 1 7 3 5)
sum=0

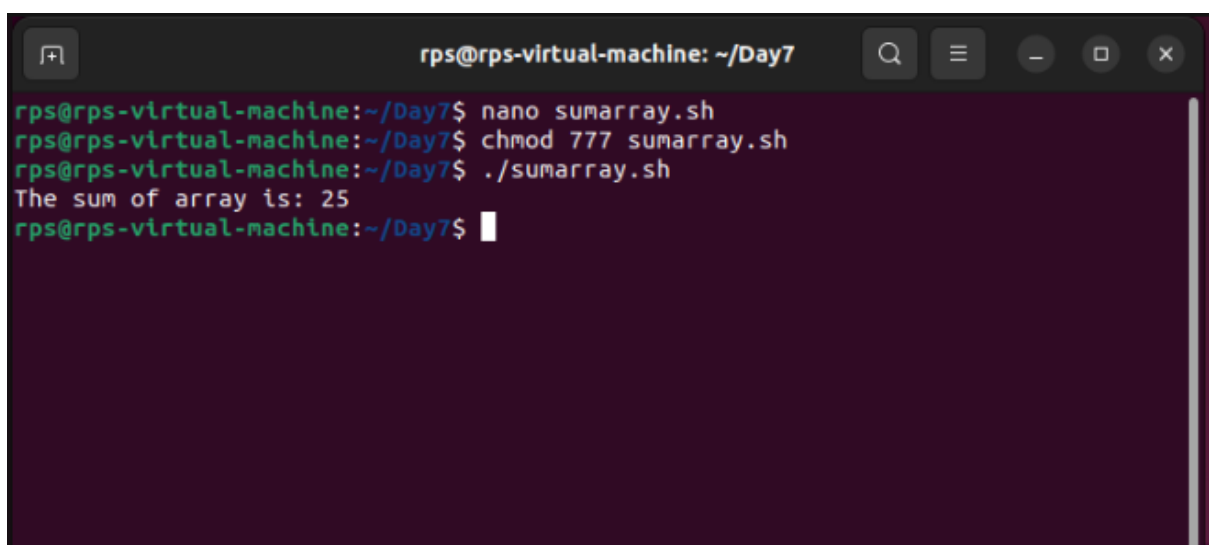
for num in "${arr[@]}"; do
    sum=$((sum+num))
done

echo "The sum of array is: $sum"
```

[ Read 10 lines ]

^G Help	^O Write Out	^W Where Is	^K Cut	^T Execute	^C Location
^X Exit	^R Read File	^_ Replace	^U Paste	^J Justify	^_ Go To Line

### Output –

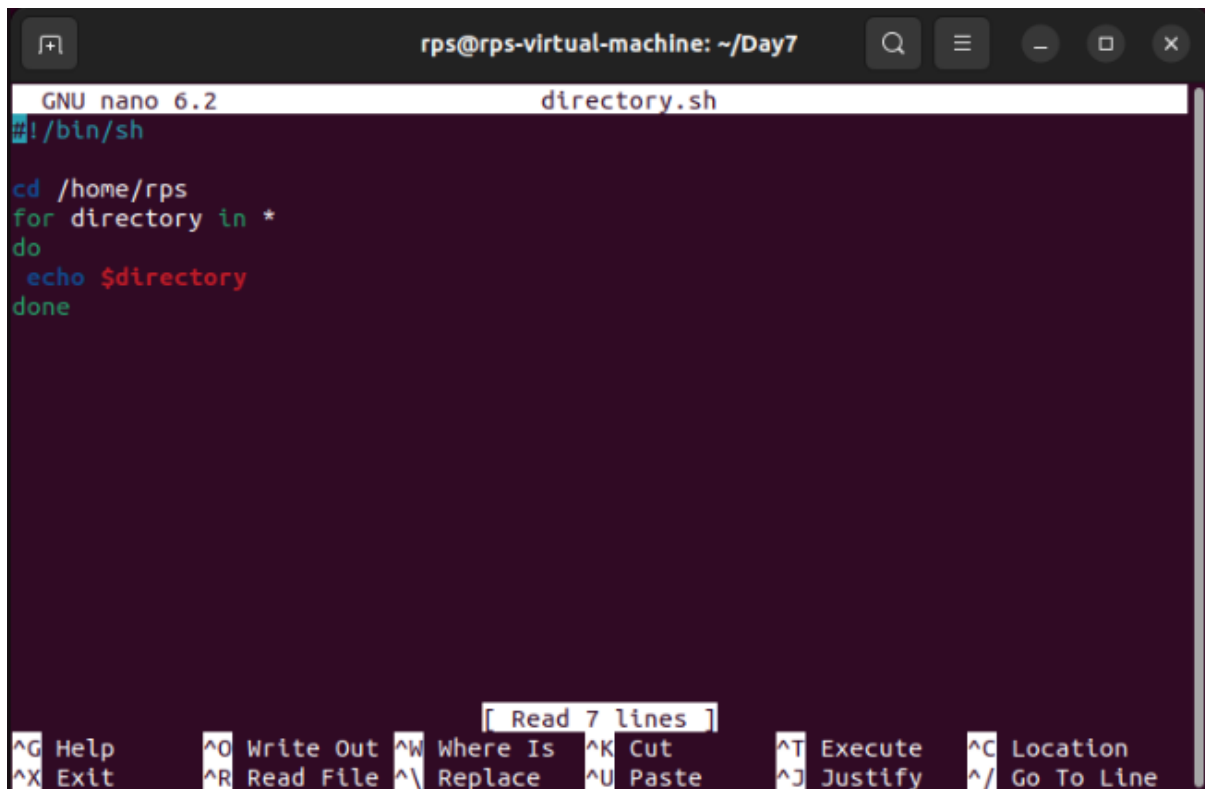


```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano sumarray.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 sumarray.sh
rps@rps-virtual-machine:~/Day7$ ./sumarray.sh
The sum of array is: 25
rps@rps-virtual-machine:~/Day7$
```

## Assignment 7 –

Display all the directory names.

### Program –



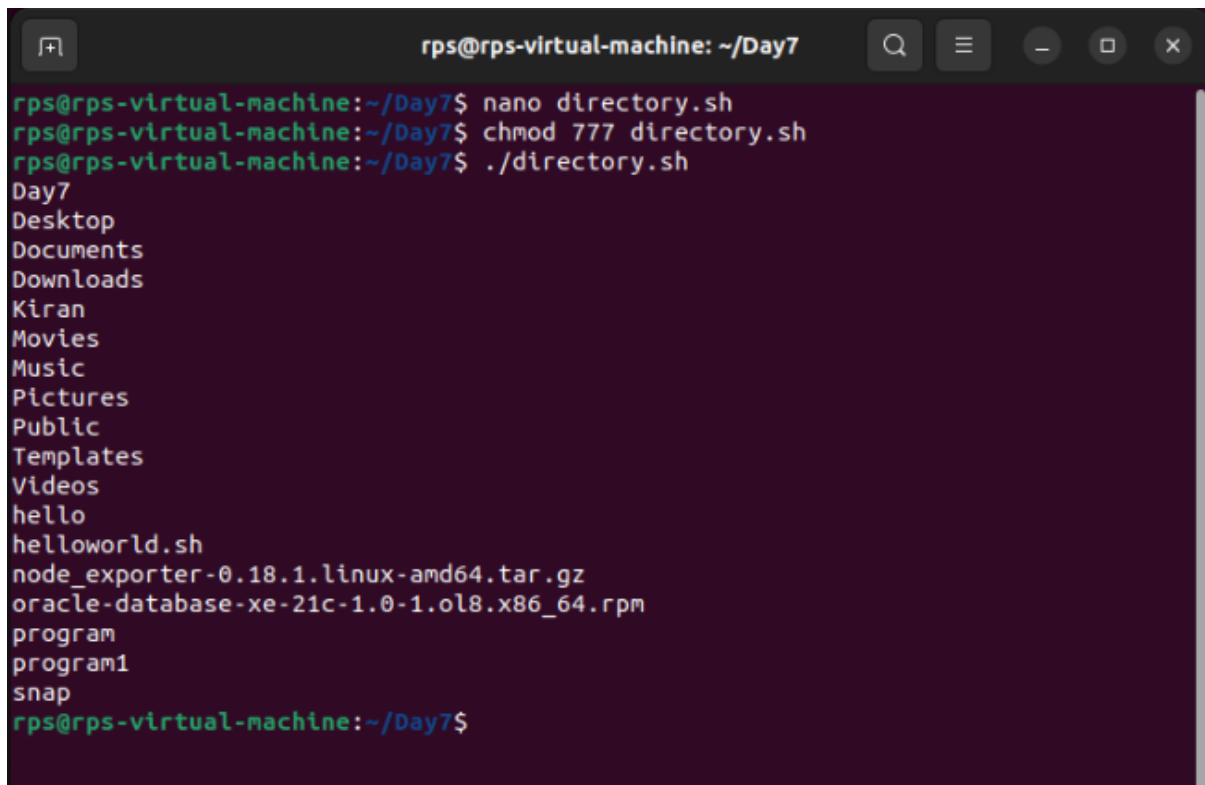
```
rps@rps-virtual-machine: ~/Day7
GNU nano 6.2 directory.sh
#!/bin/sh

cd /home/rps
for directory in *
do
    echo $directory
done
```

Read 7 lines

Help Write Out Where Is Cut Execute Location  
Exit Read File Replace Paste Justify Go To Line

### Output –



```
rps@rps-virtual-machine: ~/Day7
rps@rps-virtual-machine:~/Day7$ nano directory.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 directory.sh
rps@rps-virtual-machine:~/Day7$ ./directory.sh
Day7
Desktop
Documents
Downloads
Kiran
Movies
Music
Pictures
Public
Templates
Videos
hello
helloworld.sh
node_exporter-0.18.1.linux-amd64.tar.gz
oracle-database-xe-21c-1.0-1.018.x86_64.rpm
program
program1
snap
rps@rps-virtual-machine:~/Day7$
```

## Assignment 8 –

Check whether the number is palindrome or not.

### Program –



The screenshot shows a terminal window titled "rps@rps-virtual-machine: ~/Day7". Inside, the GNU nano 6.2 editor is open, editing a file named "Palindrome.sh". The script content is as follows:

```
#!/bin/sh

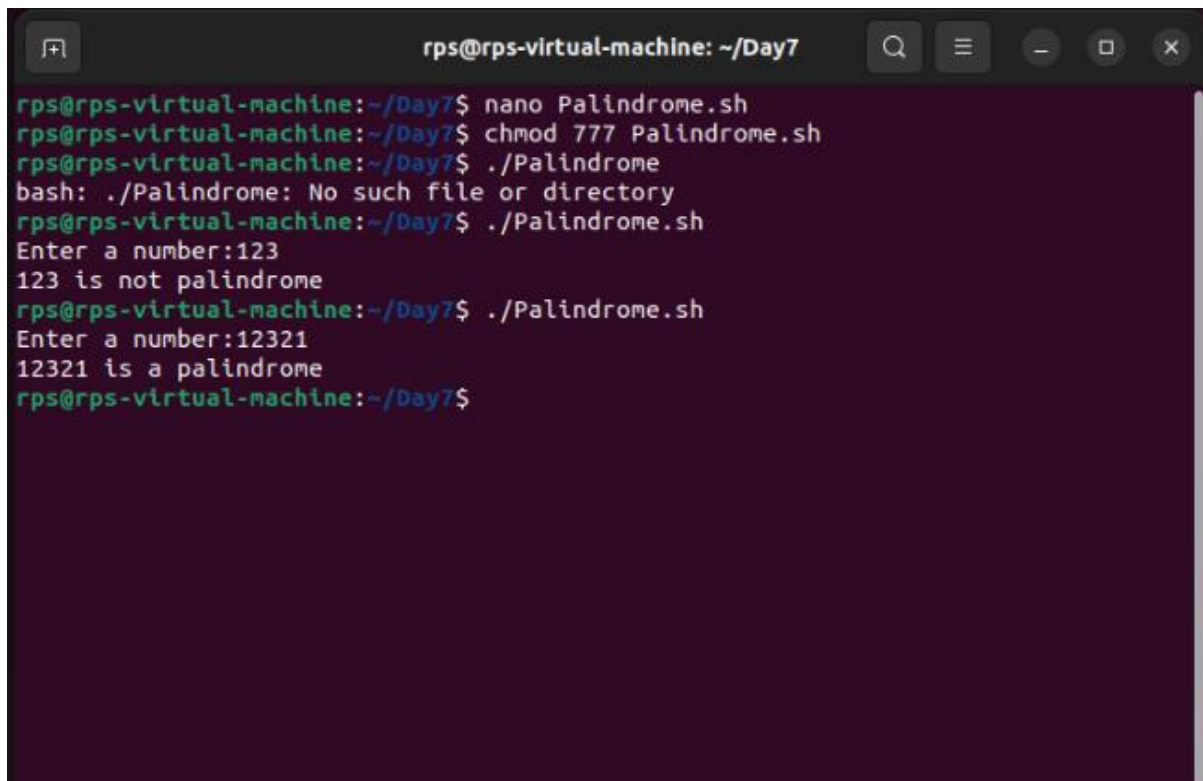
read -p "Enter a number:" num

res=$(echo $num | rev)

if [ "$num" = "$res" ]; then
    echo "$num is a palindrome"
else
    echo "$num is not palindrome"
fi
```

The bottom of the terminal shows the nano editor's help menu with various keyboard shortcuts like ^G for Help, ^O for Write Out, etc.

### Output –



The screenshot shows a terminal window titled "rps@rps-virtual-machine: ~/Day7" with the following commands and output:

```
rps@rps-virtual-machine:~/Day7$ nano Palindrome.sh
rps@rps-virtual-machine:~/Day7$ chmod 777 Palindrome.sh
rps@rps-virtual-machine:~/Day7$ ./Palindrome
bash: ./Palindrome: No such file or directory
rps@rps-virtual-machine:~/Day7$ ./Palindrome.sh
Enter a number:123
123 is not palindrome
rps@rps-virtual-machine:~/Day7$ ./Palindrome.sh
Enter a number:12321
12321 is a palindrome
rps@rps-virtual-machine:~/Day7$
```