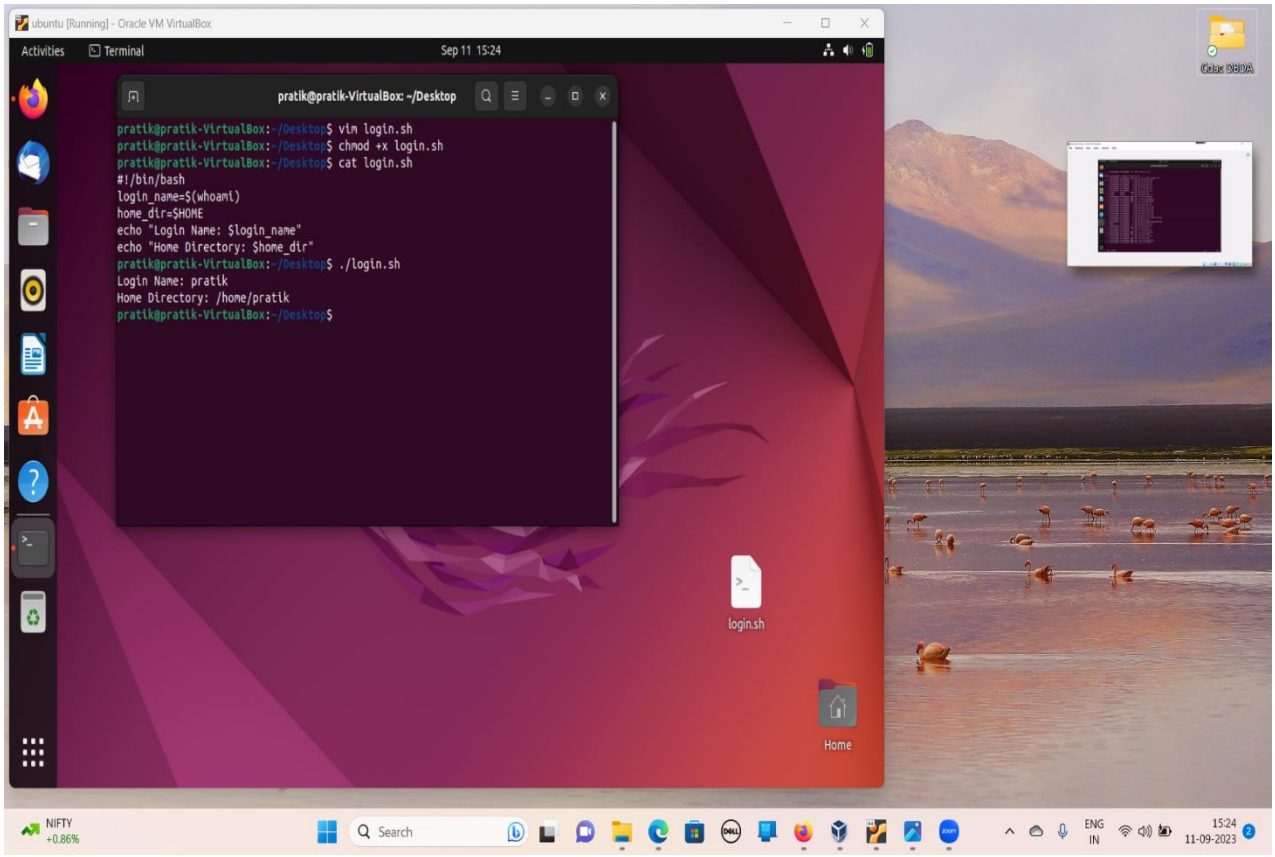
Q1)

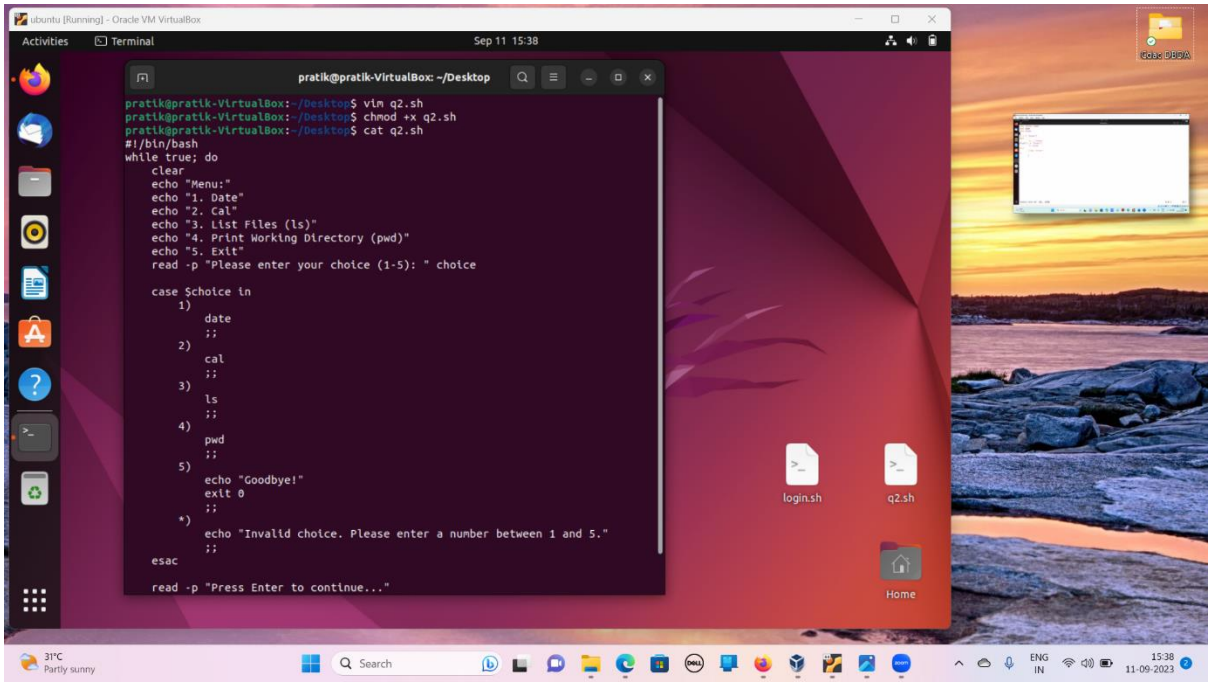
Ans=


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 11 15:24
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim login.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x login.sh
pratik@pratik-VirtualBox:~/Desktop$ cat login.sh
#!/bin/bash
login_name=$(whoami)
home_dir=$HOME
echo "Login Name: $login_name"
echo "Home Directory: $home_dir"
pratik@pratik-VirtualBox:~/Desktop$ ./login.sh
Login Name: pratik
Home Directory: /home/pratik
pratik@pratik-VirtualBox:~/Desktop$
login.sh
Home
Search
NIFTY
+0.86%
ENG
IN
15:24
11-09-2023

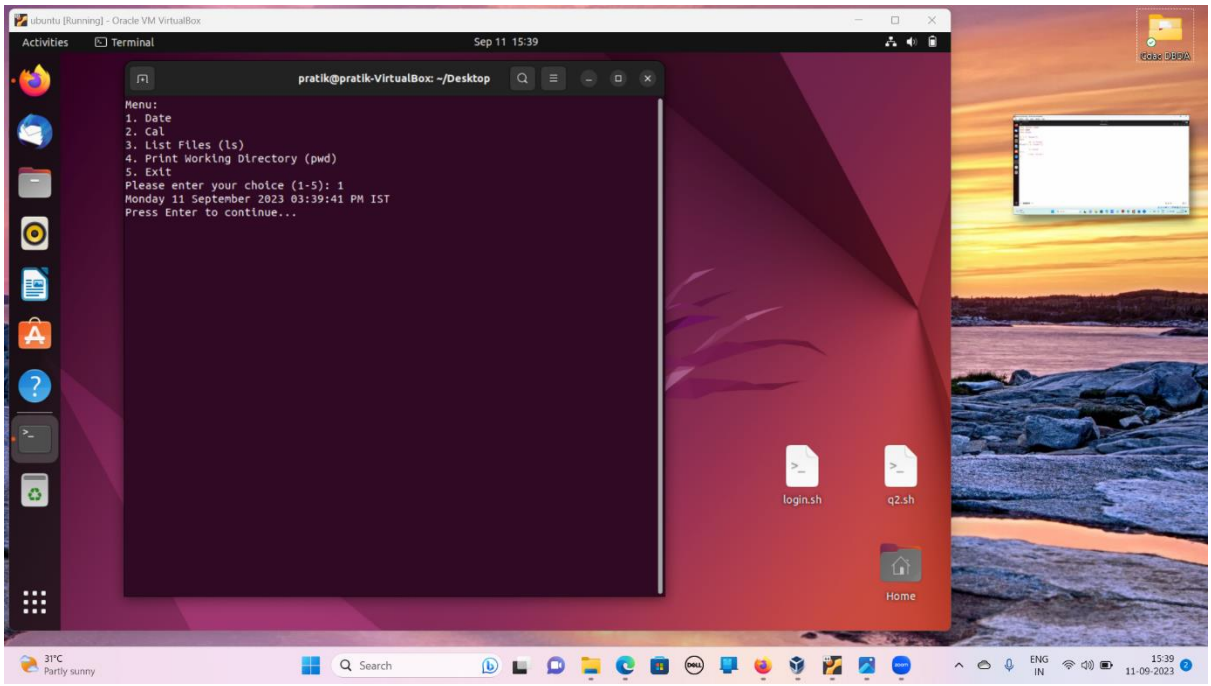
Q2)

Ans=

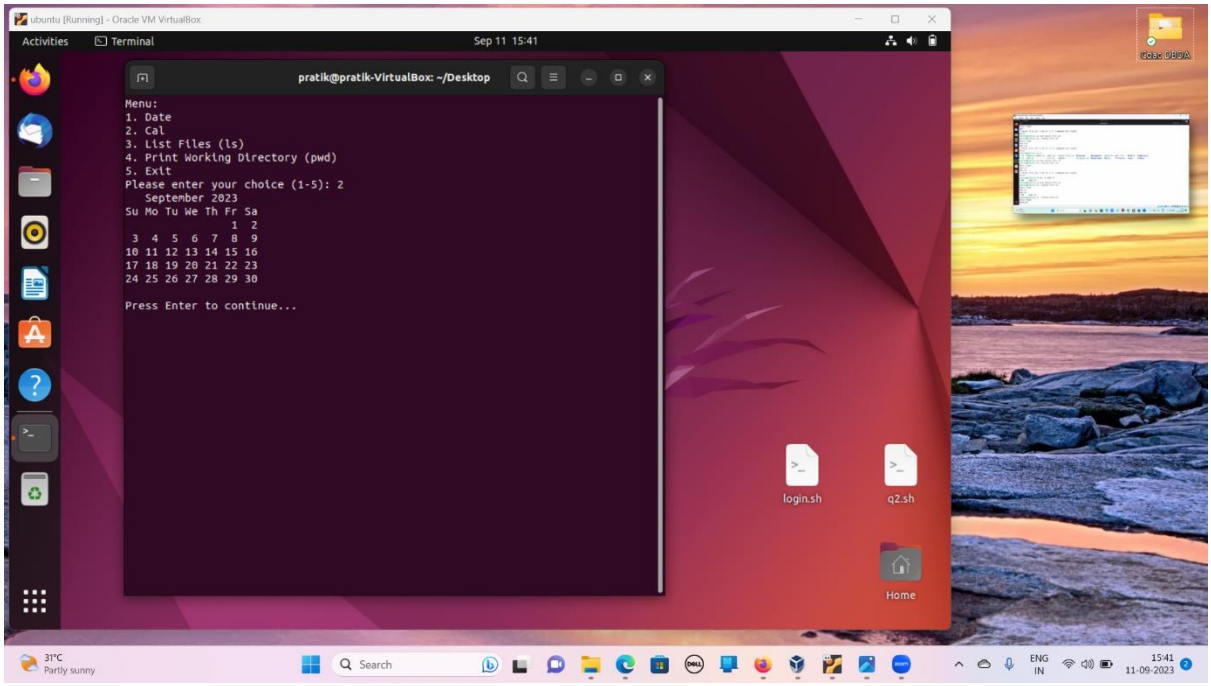
Shell Programme-



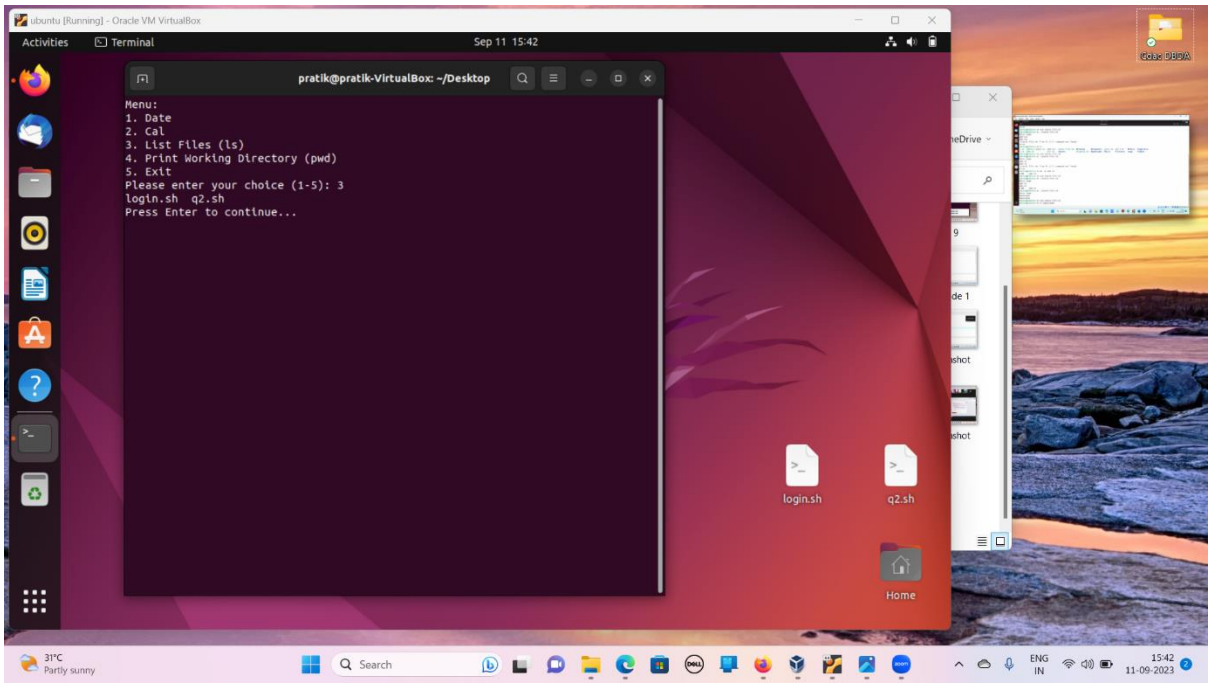
a) Date-



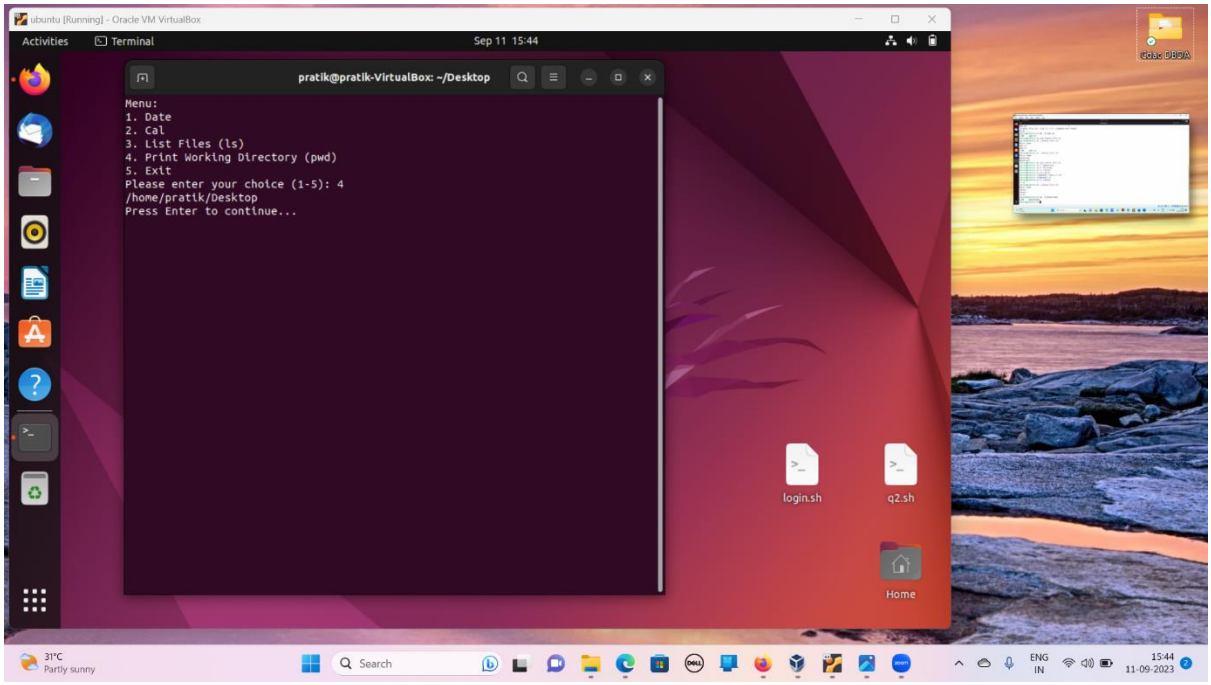
b) cal-


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 11 15:41
pratik@pratik-VirtualBox: ~/Desktop
Menu:
1. Date
2. Cal
3. List Files (ls)
4. Print Working Directory (pwd)
5. Exit
Please enter your choice (1-5): 2
September 2023
Su Mo Tu We Th Fr Sa
1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
Press Enter to continue...
login.sh
q2.sh
Home
31°C
Partly sunny
Search
ENG
IN
15:41
11-09-2023

c) ls-

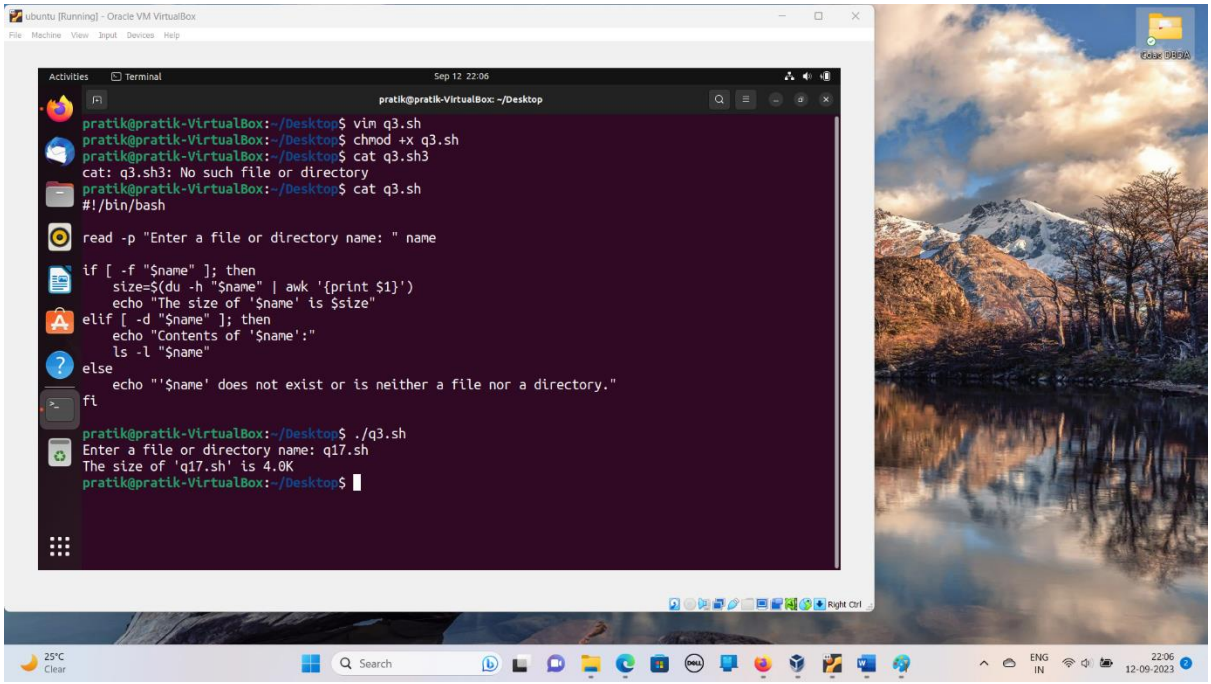

ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 11 15:42
pratik@pratik-VirtualBox: ~/Desktop
Menu:
1. Date
2. Cal
3. List Files (ls)
4. Print Working Directory (pwd)
5. Exit
Please enter your choice (1-5): 3
login.sh q2.sh
Press Enter to continue...
login.sh
q2.sh
Home
31°C
Partly sunny
Search
ENG
IN
15:42
11-09-2023

d) pwd-


Activities
Terminal
Sep 11 15:44
pratik@pratik-VirtualBox: ~/Desktop
Menu:
1. Date
2. Cal
3. List Files (ls)
4. Print Working Directory (pwd)
5. Exit
Please enter your choice (1-5): 4
/home/pratik/Desktop
Press Enter to continue...
login.sh
q2.sh
Home
Search
31°C
Partly sunny
ENG
IN
15:44
11-09-2023

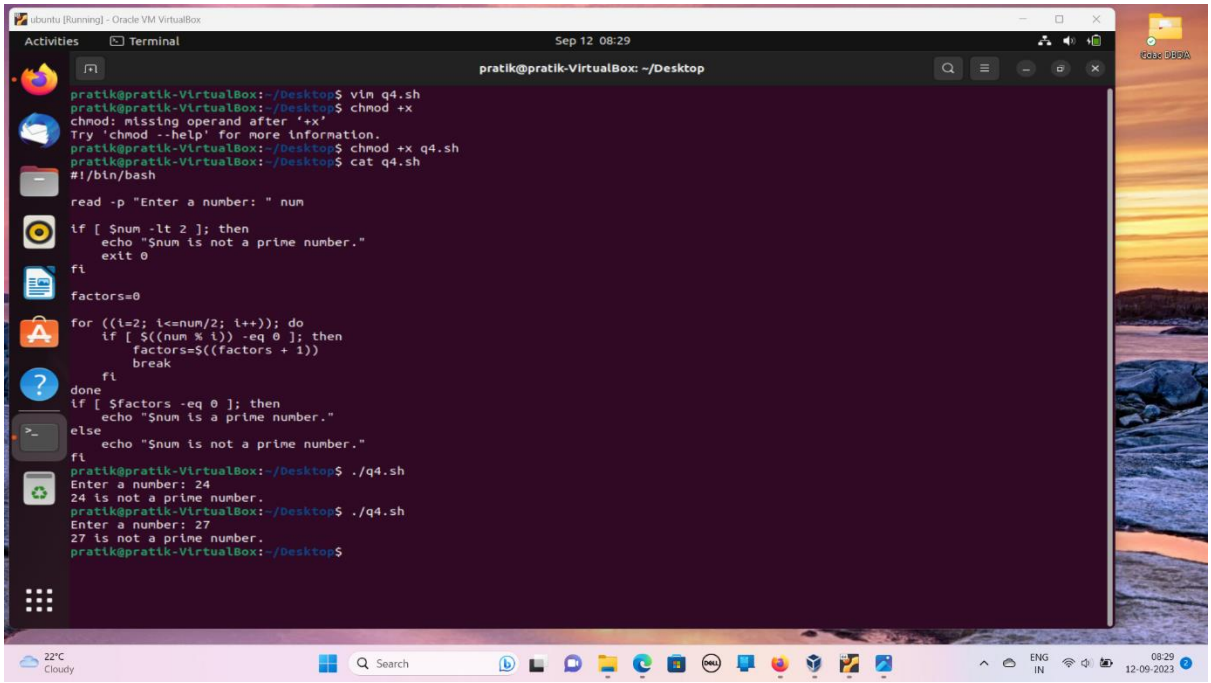
Q3)

Ans=


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 12 22:06
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim q3.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q3.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q3.sh3
cat: q3.sh3: No such file or directory
pratik@pratik-VirtualBox:~/Desktop$ cat q3.sh
#!/bin/bash
read -p "Enter a file or directory name: " name
if [-f "$name"]; then
size=$(du -h "$name" | awk '{print $1}')
echo "The size of '$name' is $size"
elif [-d "$name"]; then
echo "Contents of '$name':"
ls -l "$name"
else
echo "'$name' does not exist or is neither a file nor a directory."
fi
pratik@pratik-VirtualBox:~/Desktop$ ./q3.sh
Enter a file or directory name: q17.sh
The size of 'q17.sh' is 4.0K
pratik@pratik-VirtualBox:~/Desktop$
Right Ctrl
25°C
Clear
Search
ENG
IN
22:06
12-09-2023

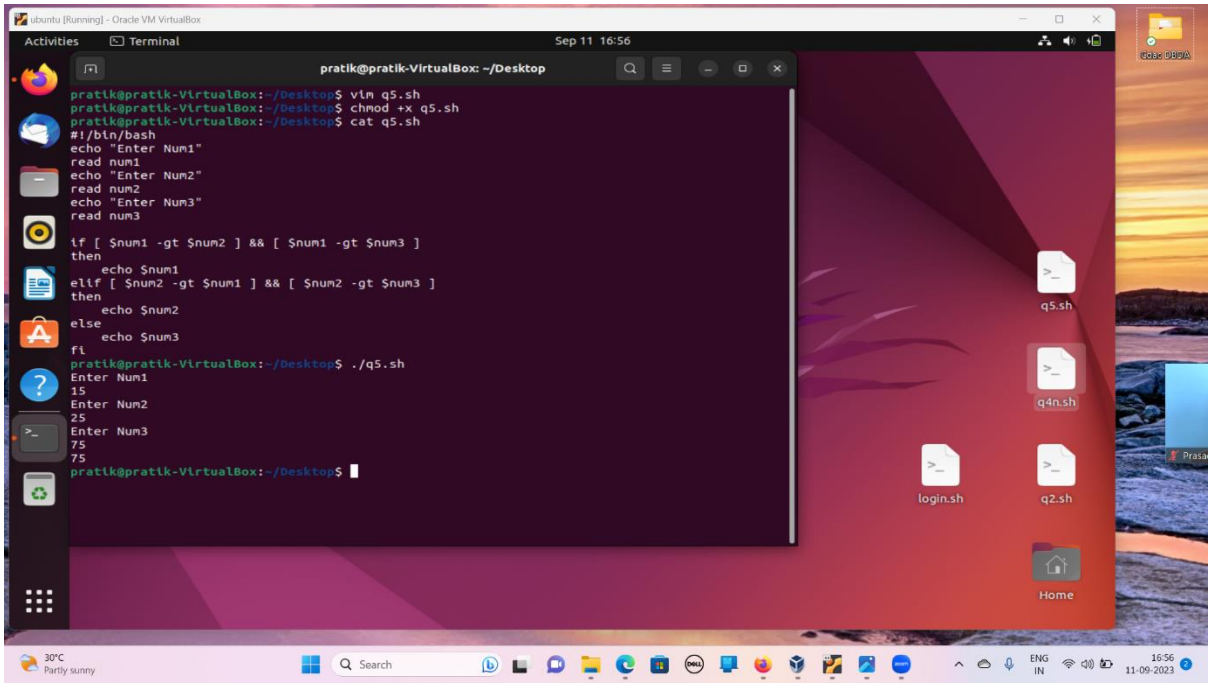
Q4)

Ans=


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 12 08:29
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim q4.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x
chmod: missing operand after '+x'
Try 'chmod --help' for more information.
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q4.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q4.sh
#!/bin/bash
read -p "Enter a number: " num
if [$num -lt 2]; then
echo "$num is not a prime number."
exit 0
fi
factors=0
for ((i=2; i<=num/2; i++)); do
if [$((num % i)) -eq 0]; then
factors=$((factors + 1))
break
fi
done
if [$factors -eq 0]; then
echo "$num is a prime number."
else
echo "$num is not a prime number."
fi
pratik@pratik-VirtualBox:~/Desktop$ ./q4.sh
Enter a number: 24
24 is not a prime number.
pratik@pratik-VirtualBox:~/Desktop$ ./q4.sh
Enter a number: 27
27 is not a prime number.
pratik@pratik-VirtualBox:~/Desktop$
22°C
Cloudy
Search
ENG
IN
08:29
12-09-2023

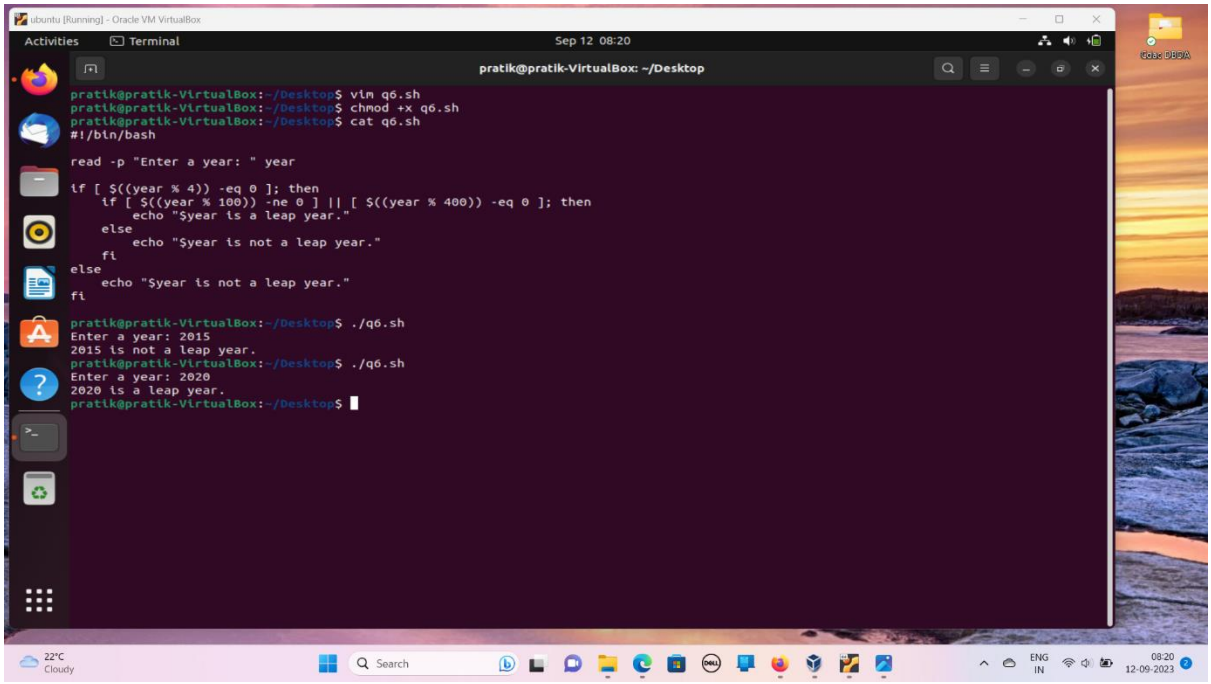
Q5)

Ans=


Activities
Terminal
Sep 11 16:56
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim q5.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q5.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q5.sh
#!/bin/bash
echo "Enter Num1"
read num1
echo "Enter Num2"
read num2
echo "Enter Num3"
read num3
if [$num1 -gt $num2] && [$num1 -gt $num3]
then
echo $num1
elif [$num2 -gt $num1] && [$num2 -gt $num3]
then
echo $num2
else
echo $num3
fi
pratik@pratik-VirtualBox:~/Desktop$ ./q5.sh
Enter Num1
15
Enter Num2
25
Enter Num3
75
75
pratik@pratik-VirtualBox:~/Desktop$
q5.sh
q4n.sh
login.sh
q2.sh
Home

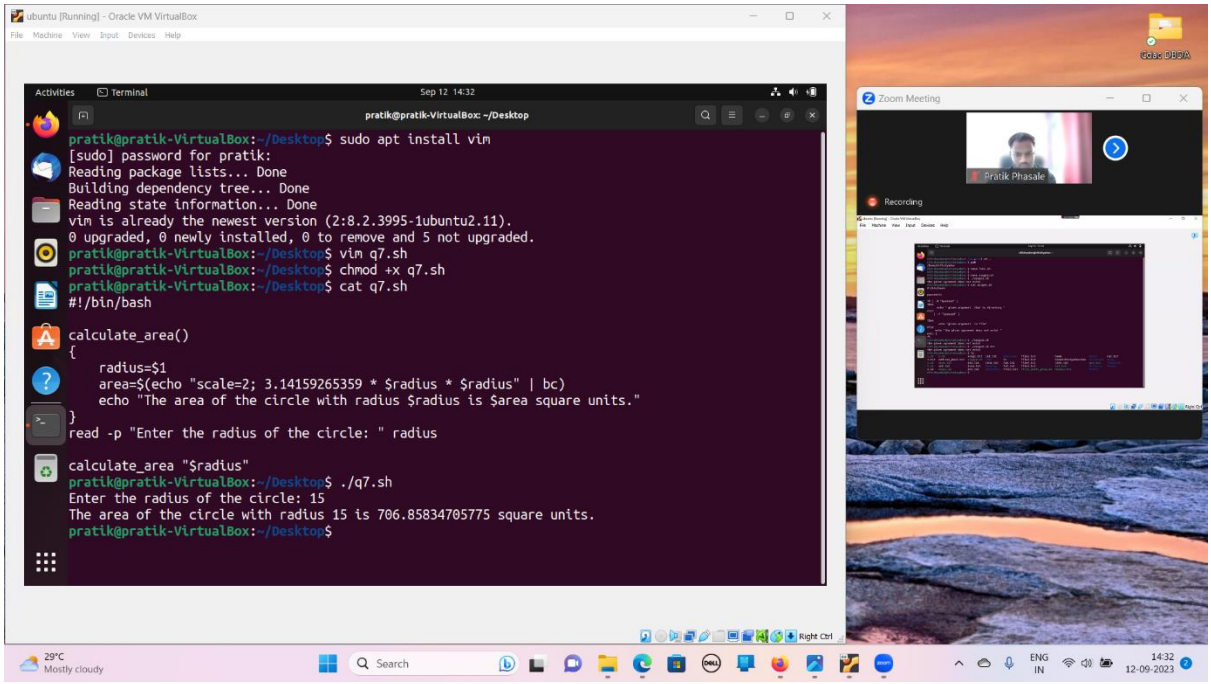
Q6)

Ans=


Activities
Terminal
Sep 12 08:20
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim q6.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q6.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q6.sh
#!/bin/bash
read -p "Enter a year: " year
if [$((year % 4)) -eq 0]; then
if [$((year % 100)) -ne 0] || [$((year % 400)) -eq 0]; then
echo "$year is a leap year."
else
echo "$year is not a leap year."
fi
else
echo "$year is not a leap year."
fi
pratik@pratik-VirtualBox:~/Desktop$ ./q6.sh
Enter a year: 2015
2015 is not a leap year.
pratik@pratik-VirtualBox:~/Desktop$ ./q6.sh
Enter a year: 2020
2020 is a leap year.
pratik@pratik-VirtualBox:~/Desktop$

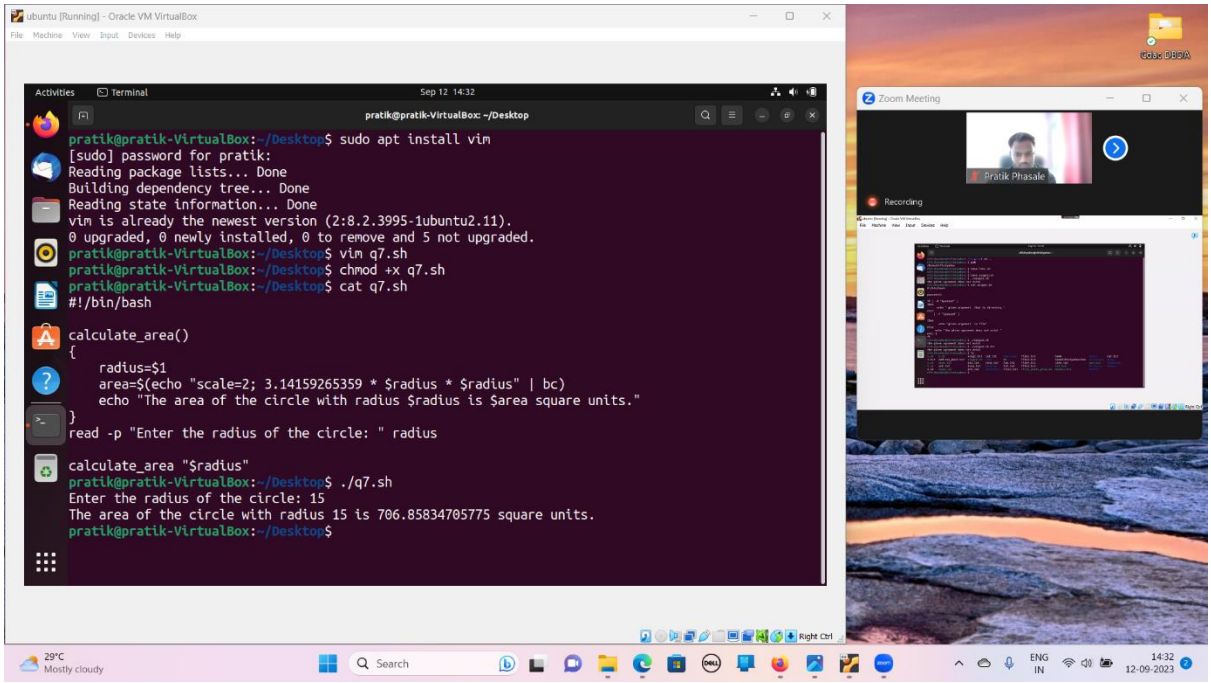
Q7)

Ans=


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 12 14:32
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ sudo apt install vim
[sudo] password for pratik:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
vim is already the newest version (2:8.2.3995-1ubuntu2.11).
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
pratik@pratik-VirtualBox:~/Desktop$ vim q7.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q7.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q7.sh
#!/bin/bash
calculate_area()
{
radius=$1
area=$(echo "scale=2; 3.14159265359 * $radius * $radius" | bc)
echo "The area of the circle with radius $radius is $area square units."
}
read -p "Enter the radius of the circle: " radius
calculate_area "$radius"
pratik@pratik-VirtualBox:~/Desktop$ ./q7.sh
Enter the radius of the circle: 15
The area of the circle with radius 15 is 706.85834705775 square units.
pratik@pratik-VirtualBox:~/Desktop$
Zoom Meeting
Pratik Phasale
Recording
29°C
Mostly cloudy
Search
ENG
IN
14:32
12-09-2023

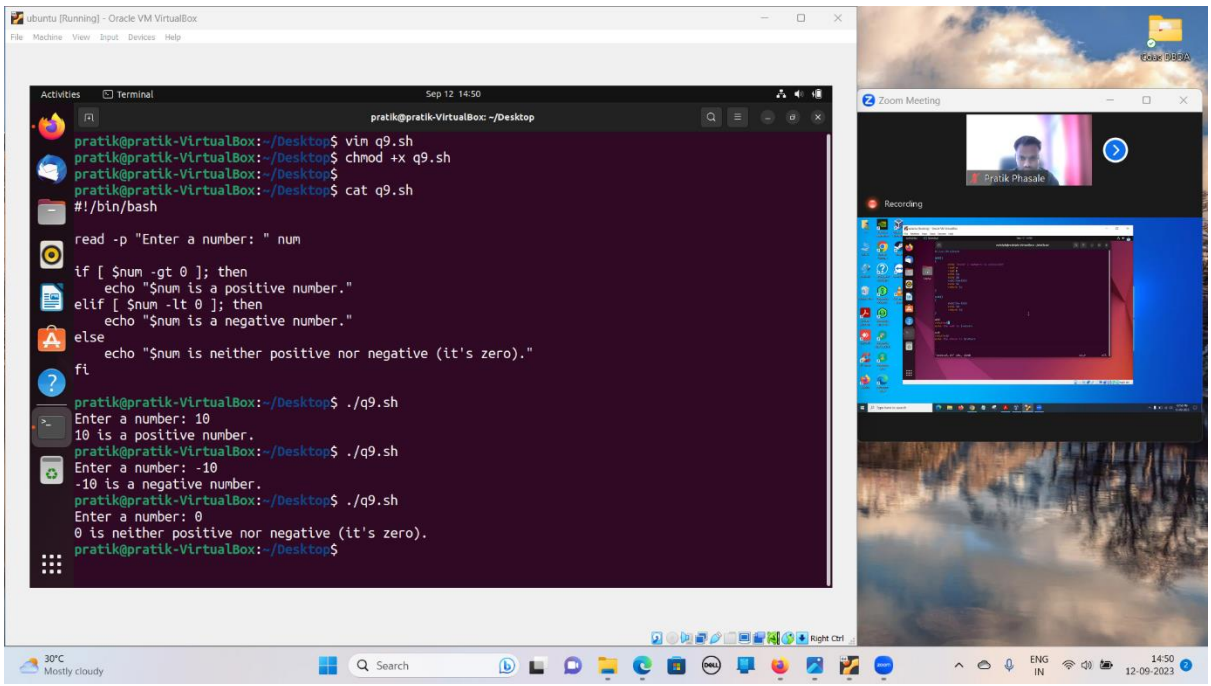
Q8)

Ans=


ubuntu [Running] - Oracle VM VirtualBox
Activities
Terminal
Sep 12 14:32
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ sudo apt install vim
[sudo] password for pratik:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
vim is already the newest version (2:8.2.3995-1ubuntu2.11).
0 upgraded, 0 newly installed, 0 to remove and 5 not upgraded.
pratik@pratik-VirtualBox:~/Desktop$ vim q7.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q7.sh
pratik@pratik-VirtualBox:~/Desktop$ cat q7.sh
#!/bin/bash
calculate_area()
{
radius=$1
area=$(echo "scale=2; 3.14159265359 * $radius * $radius" | bc)
echo "The area of the circle with radius $radius is $area square units."
}
read -p "Enter the radius of the circle: " radius
calculate_area "$radius"
pratik@pratik-VirtualBox:~/Desktop$ ./q7.sh
Enter the radius of the circle: 15
The area of the circle with radius 15 is 706.85834705775 square units.
pratik@pratik-VirtualBox:~/Desktop$
Zoom Meeting
Pratik Phasale
Recording
29°C
Mostly cloudy
Search
ENG
IN
14:32
12-09-2023

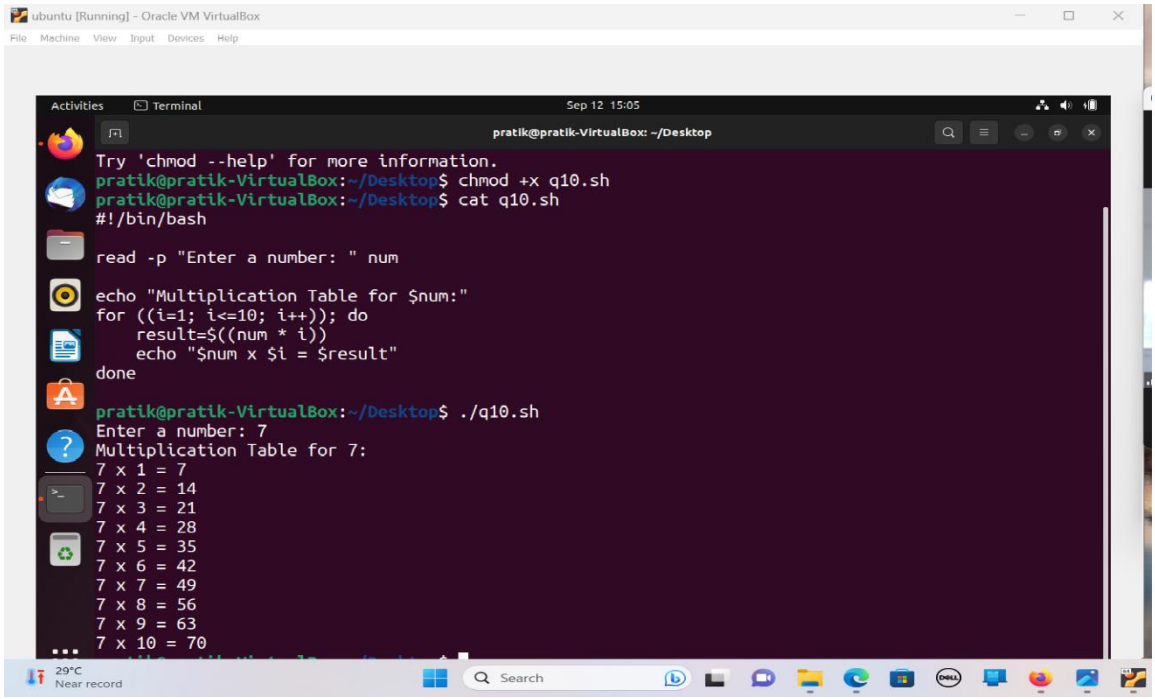
Q9)

Ans=



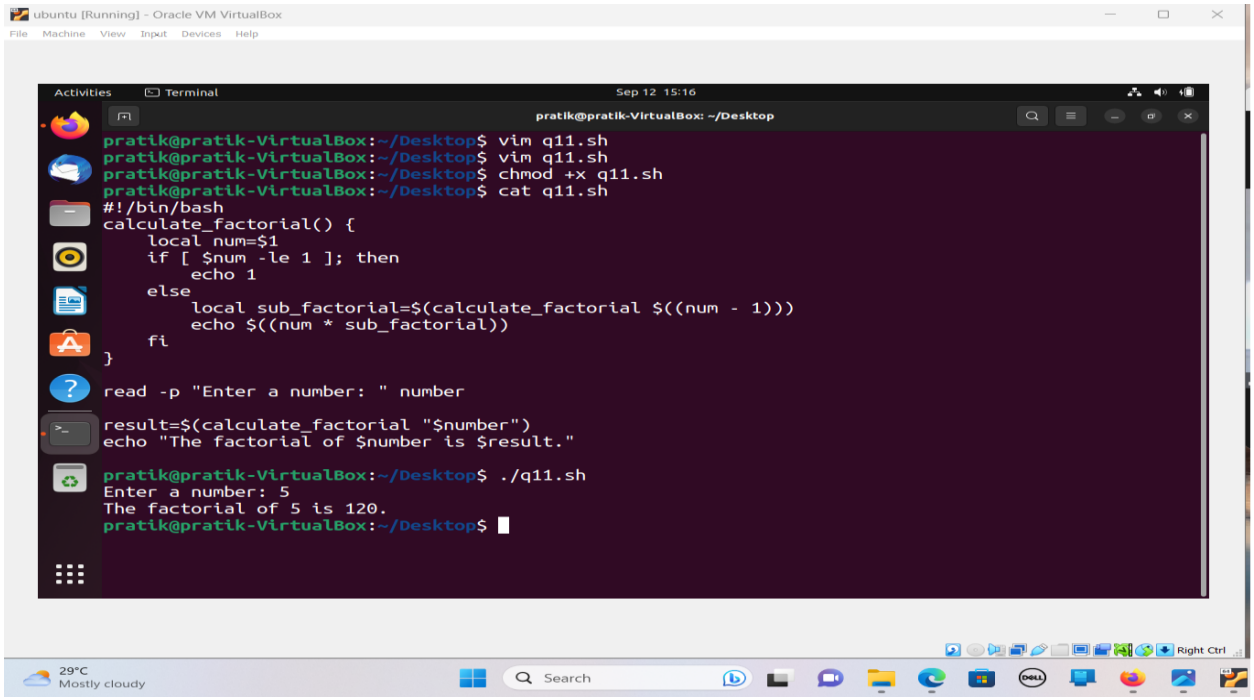
Q10)

Ans=



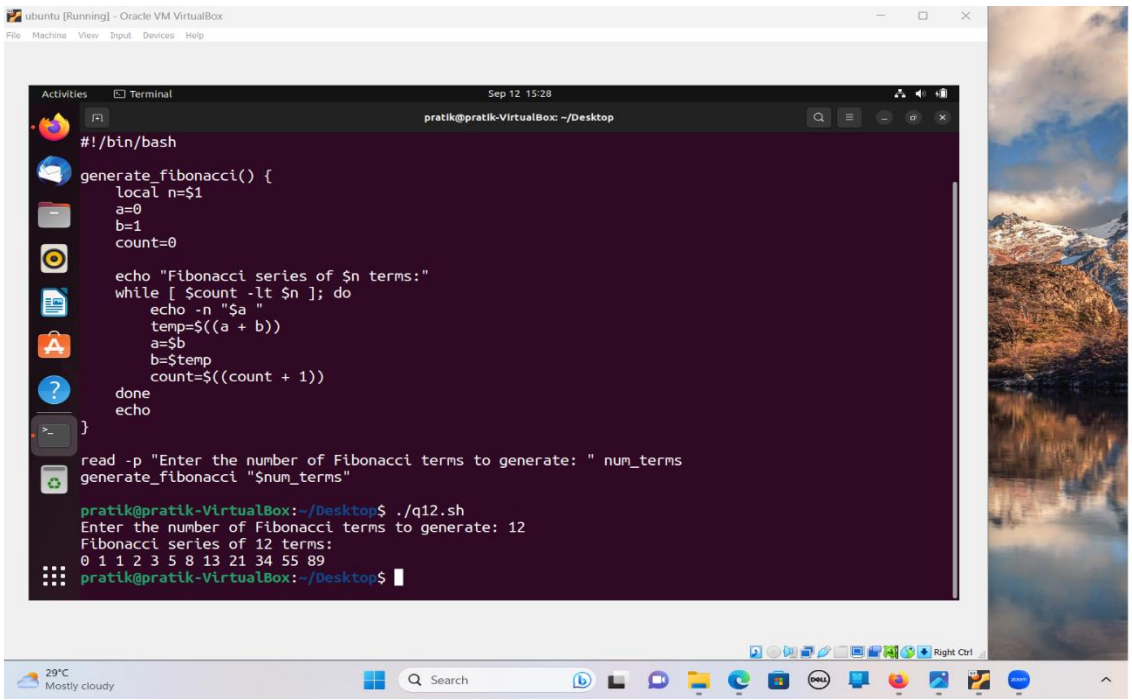
Q11)

Ans=



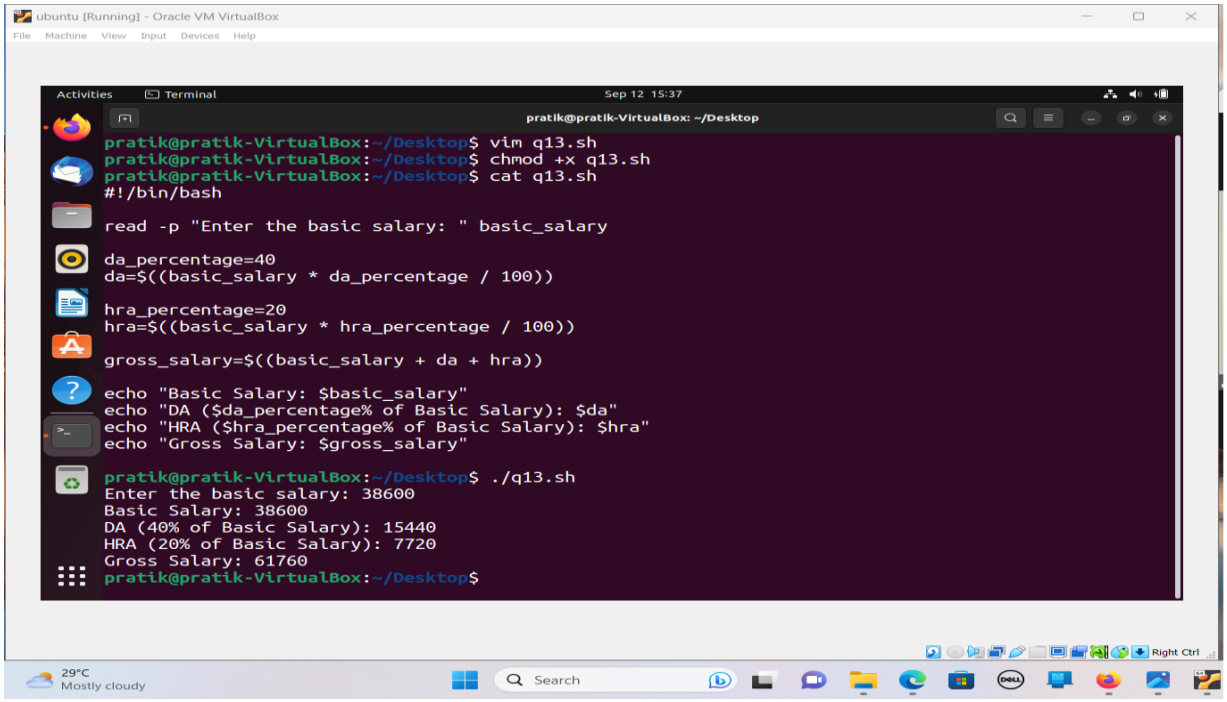
Q12)

Ans=



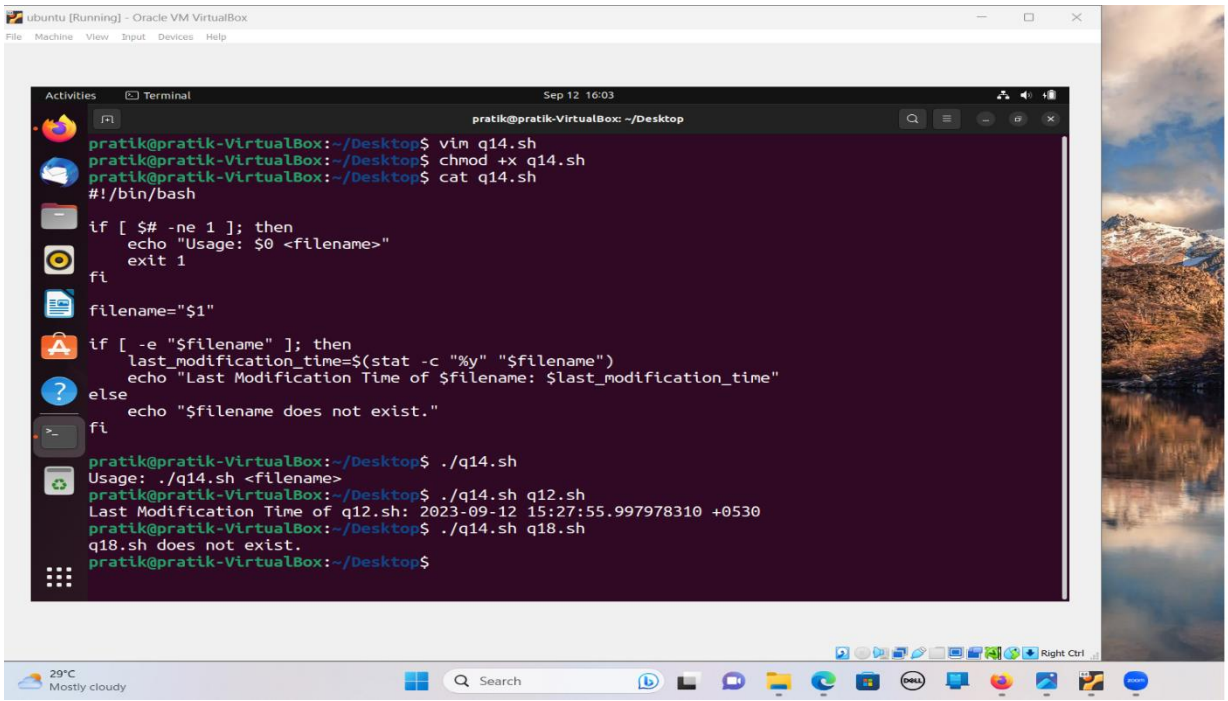
Q13)

Ans=



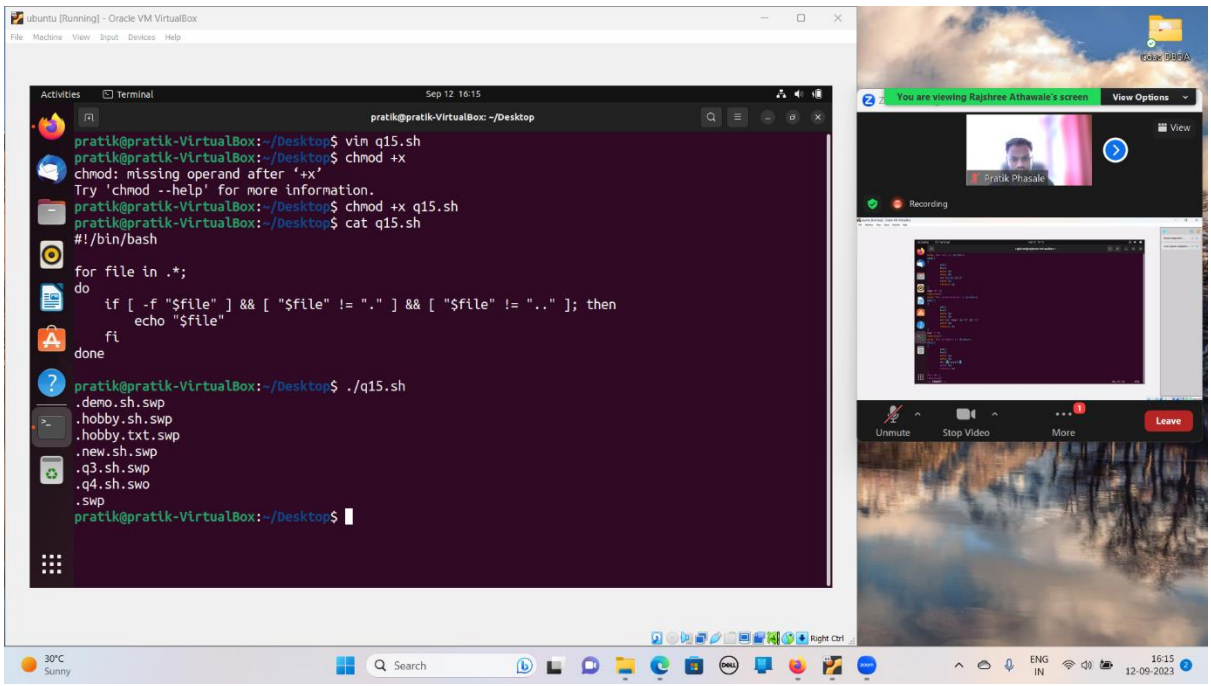
Q14)

Ans=



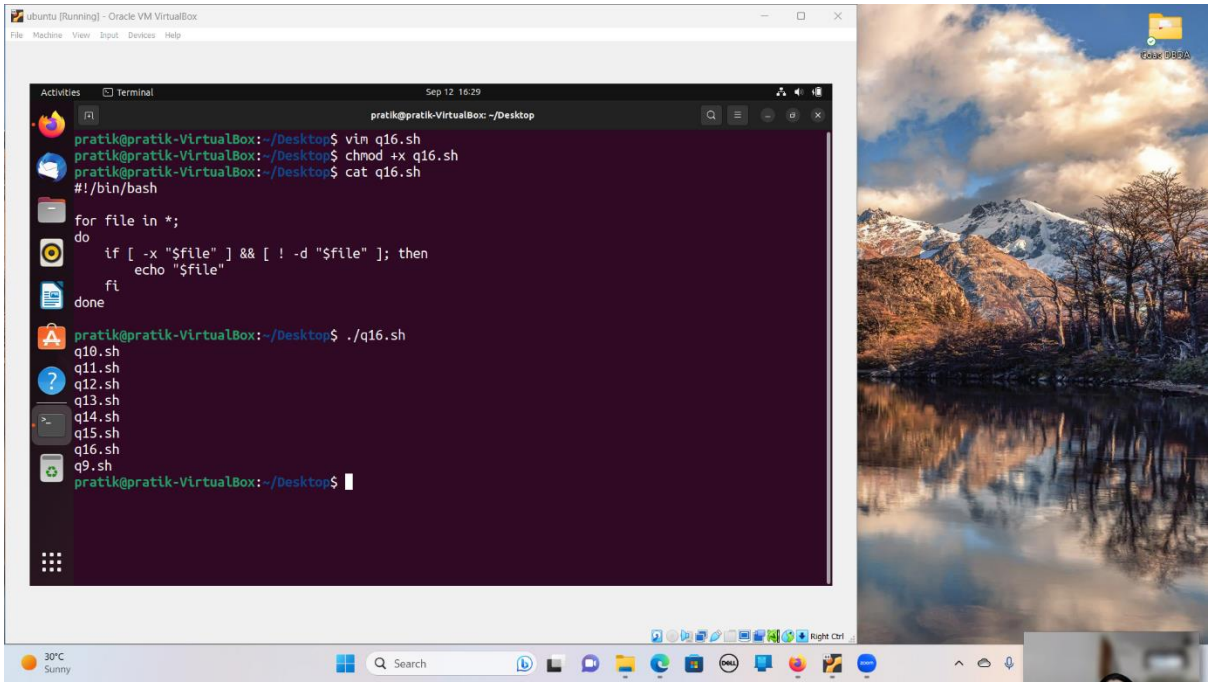
Q15)

Ans=



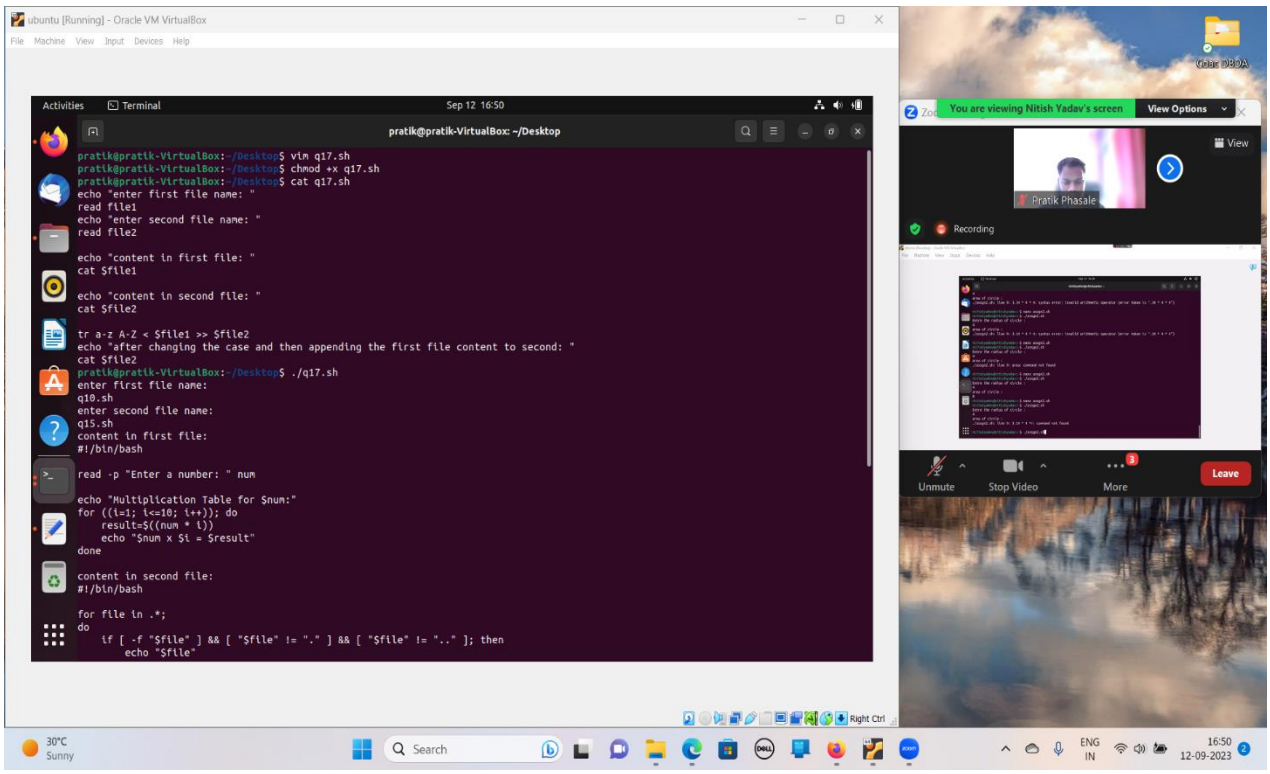
Q16)

Ans=

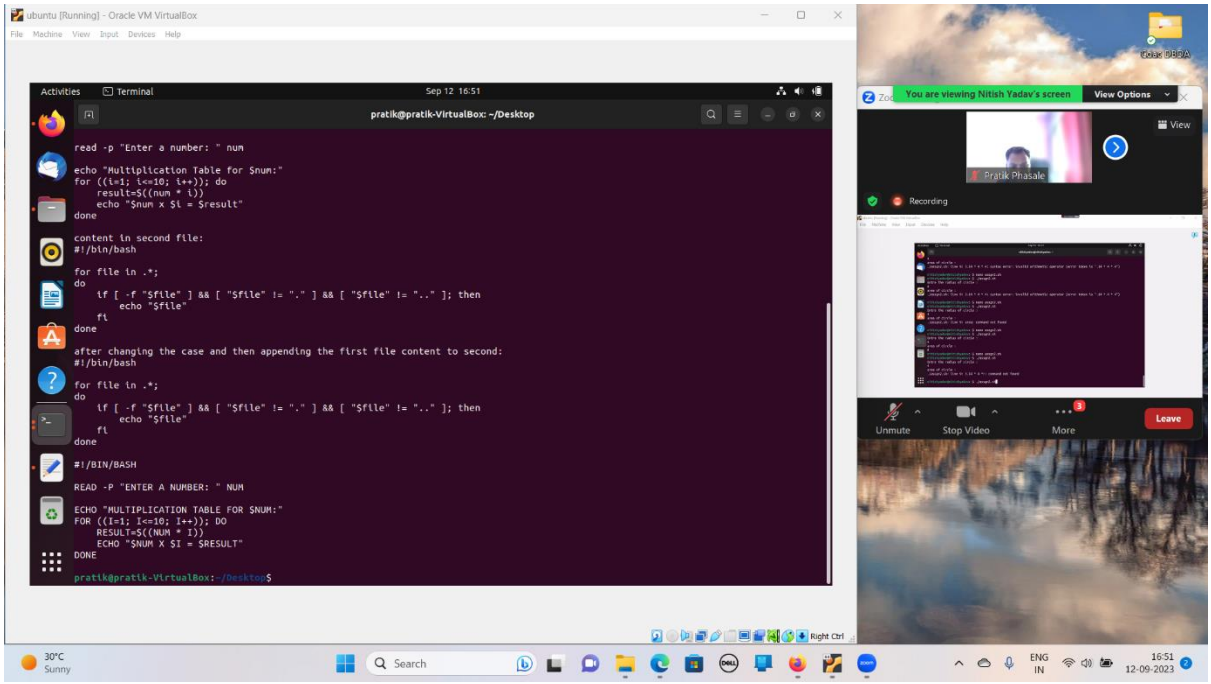


Q17)

Ans= Part 1

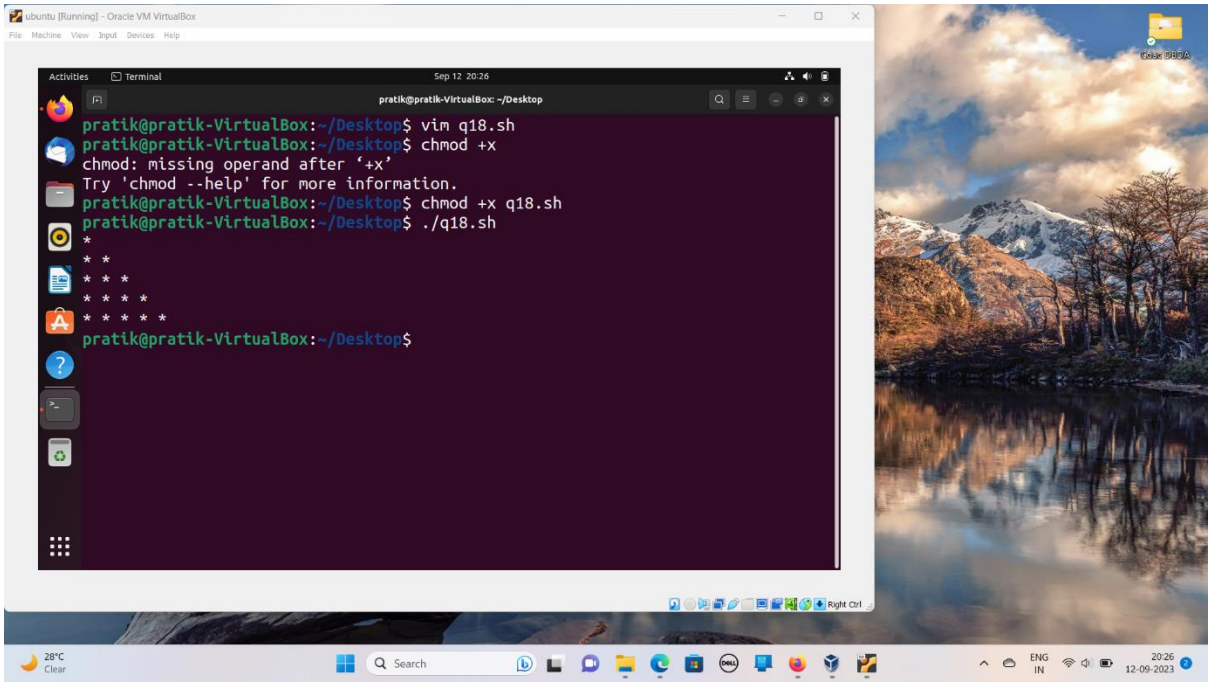


Part 2



Q18)

Ans=


ubuntu [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Activities
Terminal
Sep 12 20:26
pratik@pratik-VirtualBox: ~/Desktop
pratik@pratik-VirtualBox:~/Desktop$ vim q18.sh
pratik@pratik-VirtualBox:~/Desktop$ chmod +x
chmod: missing operand after '+x'
Try 'chmod --help' for more information.
pratik@pratik-VirtualBox:~/Desktop$ chmod +x q18.sh
pratik@pratik-VirtualBox:~/Desktop$ ./q18.sh
*
* *
* * *
* * * *
* * * * *
pratik@pratik-VirtualBox:~/Desktop$
Right Ctrl
28°C
Clear
Search
ENG
IN
20:26
12-09-2023