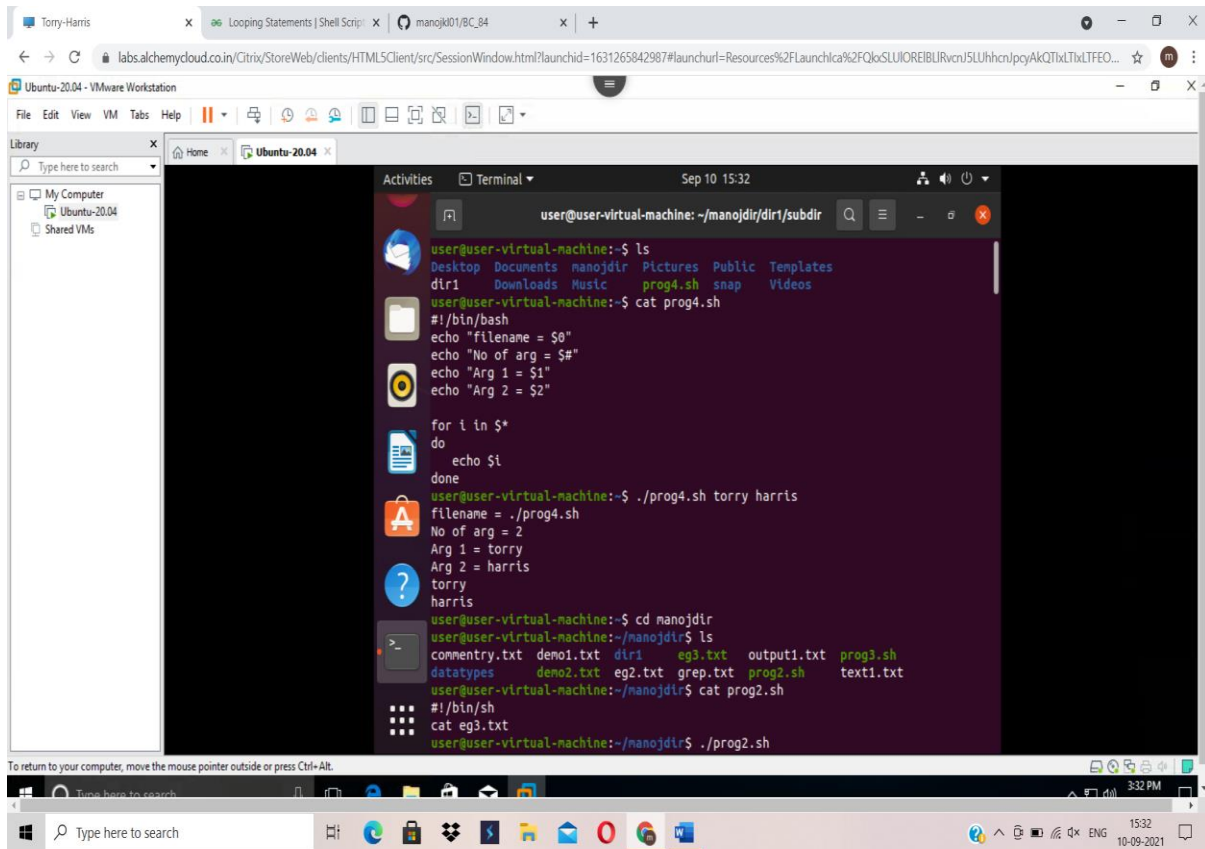
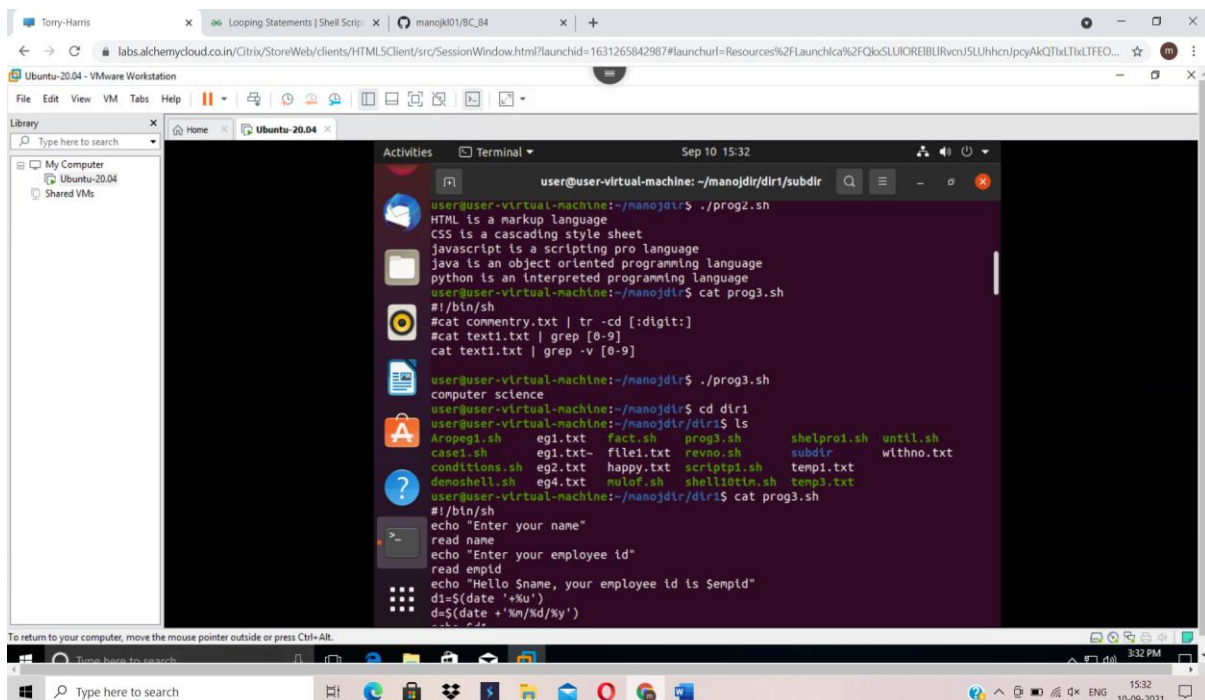


Manoj Kumar D THBS- 5938

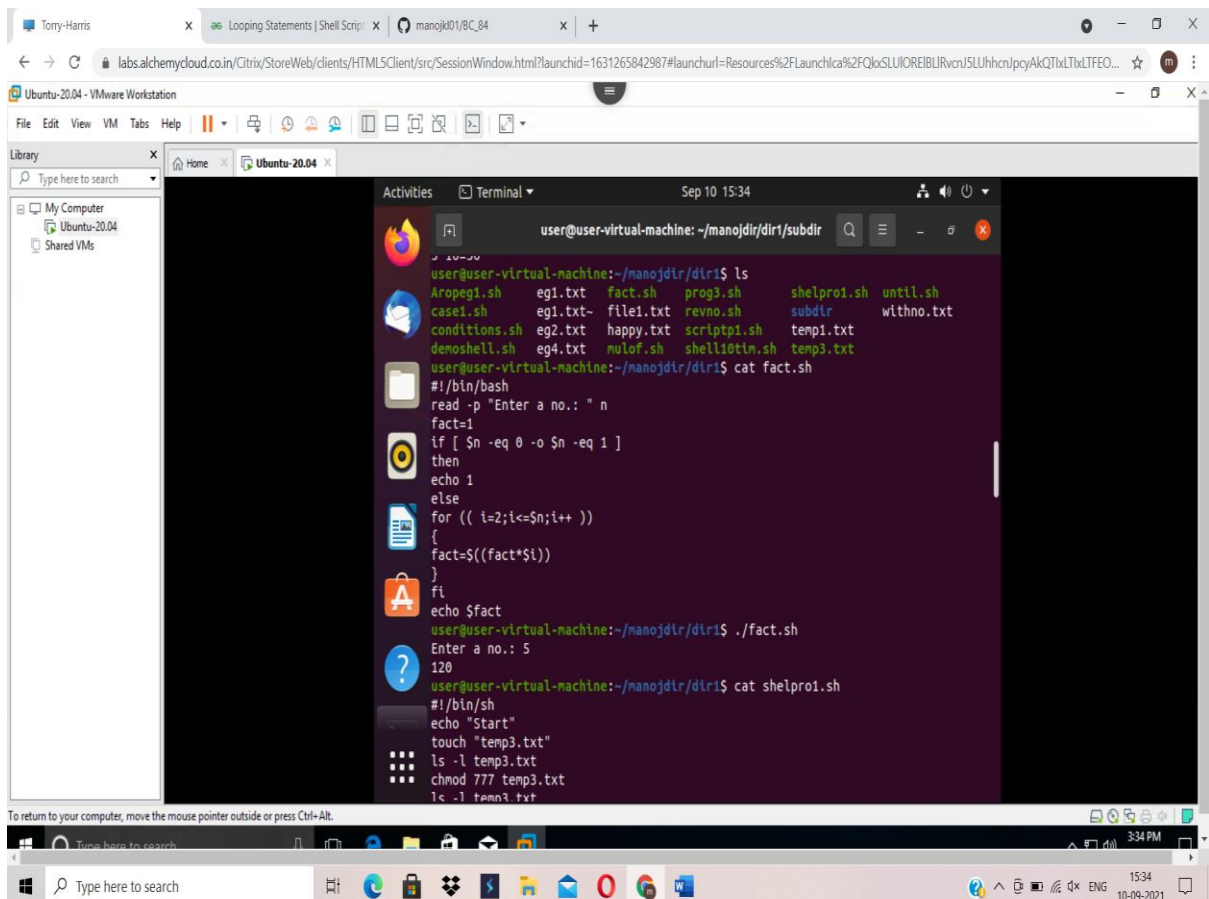
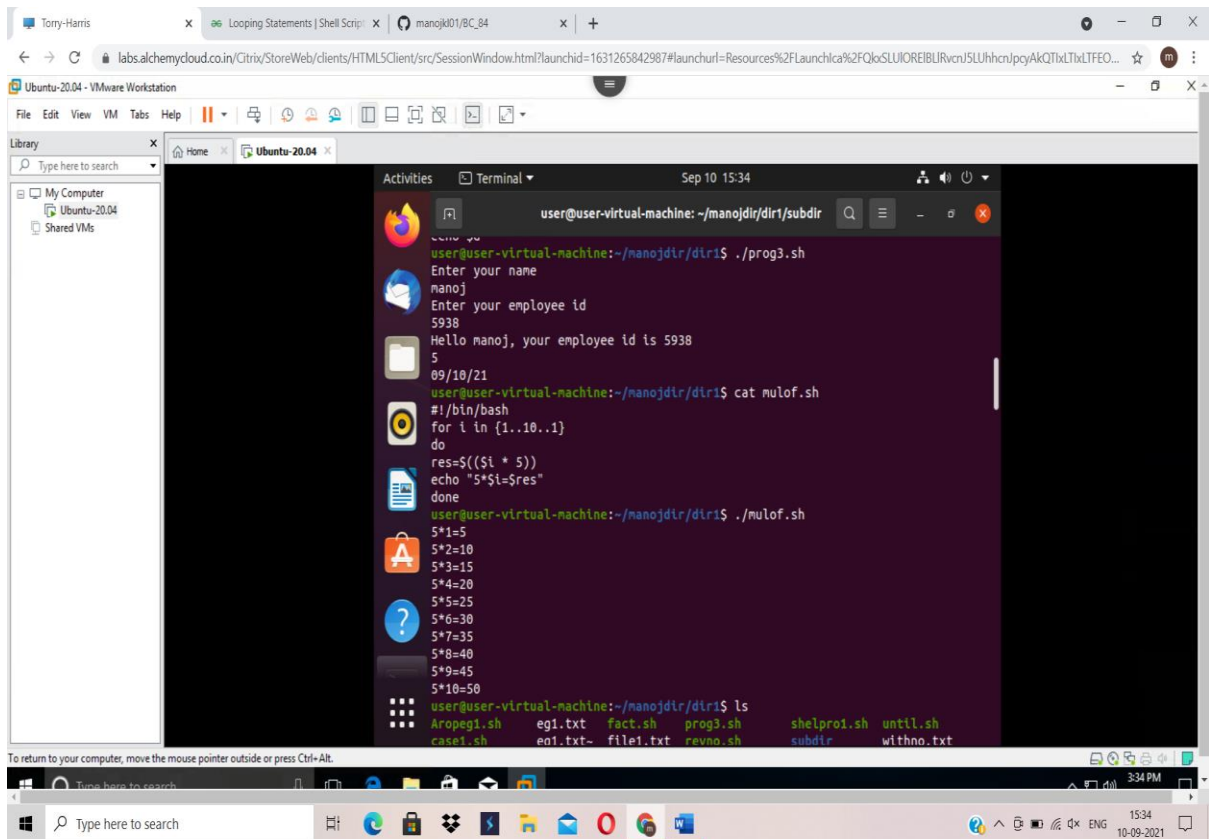
Shell Scripting



The screenshot shows a terminal window within a VMware Workstation environment. The terminal is titled "user@user-virtual-machine: ~/manojdir/dir1/subdir". The user has executed several commands:
1. `ls`: Lists the contents of the current directory, showing `Desktop`, `Documents`, `manojdir`, `Pictures`, `Public`, `Templates`, `dir1`, `Downloads`, `Music`, `prog4.sh`, `snap`, and `Videos`.
2. `cat prog4.sh`: Displays the contents of the `prog4.sh` script.
3. `./prog4.sh torry harris`: Executes the script with arguments `torry` and `harris`. The script prints the filename, number of arguments, and the arguments themselves.
4. `cd manojdir`: Changes the directory to `manojdir`.
5. `ls`: Lists the contents of `manojdir`, showing `commentry.txt`, `demo1.txt`, `dir1`, `eg3.txt`, `output1.txt`, `prog3.sh`, `datatypes`, `demo2.txt`, `eg2.txt`, `grep.txt`, `prog2.sh`, and `text1.txt`.
6. `cat prog2.sh`: Displays the contents of the `prog2.sh` script.
7. `./prog2.sh`: Executes the script.
The terminal window is part of a larger interface showing the VMware Workstation library and the host's taskbar.



The screenshot shows a terminal window within a VMware Workstation environment. The terminal is titled "user@user-virtual-machine: ~/manojdir/dir1/subdir". The user has executed several commands:
1. `./prog2.sh`: Executes the script, which prints "HTML is a markup language", "CSS is a cascading style sheet", "javascript is a scripting pro language", "java is an object oriented programming language", and "python is an interpreted programming language".
2. `cat prog3.sh`: Displays the contents of the `prog3.sh` script.
3. `#cat commentry.txt | tr -cd [:digit:]`: Executes a command to print the digits from the `commentry.txt` file.
4. `#cat text1.txt | grep [0-9]`: Executes a command to print lines from `text1.txt` containing the digit 0.
5. `cat text1.txt | grep -v [0-9]`: Executes a command to print lines from `text1.txt` not containing the digit 0.
6. `./prog3.sh`: Executes the script, which prints "computer science".
7. `cd dir1`: Changes the directory to `dir1`.
8. `ls`: Lists the contents of `dir1`, showing `Aropeg1.sh`, `eg1.txt`, `fact.sh`, `prog3.sh`, `shelpro1.sh`, `until.sh`, `case1.sh`, `eg1.txt`, `file1.txt`, `revno.sh`, `subdir`, and `wlthno.txt`.
9. `cat prog3.sh`: Displays the contents of the `prog3.sh` script.
10. `./prog3.sh`: Executes the script, which prompts the user to enter their name and employee ID, and then prints "Hello \$name, your employee id is \$empid".
The terminal window is part of a larger interface showing the VMware Workstation library and the host's taskbar.



Torry-Harris x Looping Statements | Shell Scrip x manoj01/8C_84 x +

labs.alchemycloud.co.in/Citrix/StoreWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1631265842987#launchurl=Resources%2FLaunchica%2FQoSLUIOREIBLRvcn15UhhcnjpcyAkQITxTLTFEO... ☆ m

Ubuntu-20.04 - VMware Workstation

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Activities Terminal ▾ Sep 10 15:35

user@user-virtual-machine: ~/manojdir/dlr1/subdir

```
ecno permission granted
user@user-virtual-machine:~/manojdir/dlr1$ ./shelpro1.sh
Start
-rwxrwxrwx 1 user user 0 Sep 10 15:25 temp3.txt
-rwxrwxrwx 1 user user 0 Sep 10 15:25 temp3.txt
permission granted
user@user-virtual-machine:~/manojdir/dlr1$ ls
Aropeg1.sh  eg1.txt  fact.sh  prog3.sh  shelpro1.sh  until.sh
case1.sh    eg1.txt  file1.txt  revno.sh  subdir       withno.txt
conditions.sh eg2.txt  happy.txt  scriptp1.sh temp1.txt
demoshell.sh eg4.txt  nulof.sh  shell10tin.sh temp3.txt
user@user-virtual-machine:~/manojdir/dlr1$ cat scriptp1.sh
#!/bin/sh
#sort -o output.txt places.txt
#sort -r -o out2.txt places.txt
#cut -d - -f2 file1.txt
#cat happy.txt | grep ^[Happy]
#ls -R
#wc happy.txt
#cat withno.txt | tr -d [0-9]
#cat -b withno.txt
cat withno.txt | tr a-z A-Z
cat happy.txt | tr A-Z a-z
user@user-virtual-machine:~/manojdir/dlr1$ ./scriptp1.sh
MANOJ21
KISHAN22
MANJU22222220
KIRAN22
LOKESH23
happy birthday
happy morning
good morning
hello world
user@user-virtual-machine:~/manojdir/dlr1$ cat revno.sh
#!/bin/bash
read -p "enter a no. " n
rev=0
while [ $n -ne 0 ]
do
    rem=$((n%10))
    rev=$((rev*10+rem))
    n=$((n/10))
done
echo $rev
user@user-virtual-machine:~/manojdir/dlr1$ ./revno.sh
enter a no. 123
321
user@user-virtual-machine:~/manojdir/dlr1$ cat demoshell.sh
#!/bin/bash
read -p "Enter file name: " fname
concat="subdir/"$fname
cm=$(find subdir -name $fname)
if [ $cm == $concat ]
then
    echo "File found"
fi
```

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

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15:35 10-09-2021

Torry-Harris x Looping Statements | Shell Scrip x manoj01/8C_84 x +

labs.alchemycloud.co.in/Citrix/StoreWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1631265842987#launchurl=Resources%2FLaunchica%2FQoSLUIOREIBLRvcn15UhhcnjpcyAkQITxTLTFEO... ☆ m

Ubuntu-20.04 - VMware Workstation

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Ubuntu-20.04

Shared VMs

Home x Ubuntu-20.04 x

Activities Terminal ▾ Sep 10 15:35

user@user-virtual-machine: ~/manojdir/dlr1/subdir

```
MANJU22222220
KIRAN22
LOKESH23
happy birthday
happy morning
good morning
hello world
user@user-virtual-machine:~/manojdir/dlr1$ cat revno.sh
#!/bin/bash
read -p "enter a no. " n
rev=0
while [ $n -ne 0 ]
do
    rem=$((n%10))
    rev=$((rev*10+rem))
    n=$((n/10))
done
echo $rev
user@user-virtual-machine:~/manojdir/dlr1$ ./revno.sh
enter a no. 123
321
user@user-virtual-machine:~/manojdir/dlr1$ cat demoshell.sh
#!/bin/bash
read -p "Enter file name: " fname
concat="subdir/"$fname
cm=$(find subdir -name $fname)
if [ $cm == $concat ]
then
    echo "File found"
fi
```

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15:35 10-09-2021

Torry-Harris x Looping Statements | Shell Script x manojk01/BC_84 x +

labs.alchemycloud.co.in/Citrix/StoreWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1631265842987#launchurl=Resources%2FLaunchica%2FQloSLUIOREIBURvcl5LUhcnjpcyAkQITxLTxLTfEO... ☆ m :

Ubuntu-20.04 - VMware Workstation

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Ubuntu-20.04
Shared VMs

Activities Terminal ▾ Sep 10 15:36

user@user-virtual-machine: ~/manojdir/dtr1/subdir

```
321
user@user-virtual-machine:~/manojdir/dtr1$ cat denoshell.sh
#!/bin/bash
read -p "Enter file name: " fname
concat="subdir/"$fname
cmd=$(find subdir -name $fname)
if [ $cmd == $concat ]
then
echo "File found"
else
echo "File not found"
fi
user@user-virtual-machine:~/manojdir/dtr1$ ./denoshell.sh
Enter file name: out2.txt
File found
user@user-virtual-machine:~/manojdir/dtr1$ ls
Aropegi.sh  eg1.txt  fact.sh  prog3.sh  shelpro1.sh  until.sh
case1.sh    eg1.txt  file1.txt  revmo.sh  subdir       withno.txt
conditions.sh eg2.txt  happy.txt  scriptpi.sh temp1.txt
denoshell.sh eg4.txt  mutor.sh  shell10tin.sh temp3.txt
user@user-virtual-machine:~/manojdir/dtr1$ gedit shell10tin.sh
user@user-virtual-machine:~/manojdir/dtr1$ ./shell10tin.sh
shellscript
shellscript
shellscript
shellscript
shellscript
shellscript
shellscript
```

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

Type here to search

15:36 10-09-2021

Torry-Harris x Looping Statements | Shell Script x manojk01/BC_84 x +

labs.alchemycloud.co.in/Citrix/StoreWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1631265842987#launchurl=Resources%2FLaunchica%2FQloSLUIOREIBURvcl5LUhcnjpcyAkQITxLTxLTfEO... ☆ m :

Ubuntu-20.04 - VMware Workstation

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Ubuntu-20.04
Shared VMs

Activities Terminal ▾ Sep 10 15:37

user@user-virtual-machine: ~/manojdir/dtr1/subdir

```
shellscript
user@user-virtual-machine:~/manojdir/dtr1$ cat conditions.sh
#!/bin/bash
read -p "a=" a
read -p "b=" b
read -p "c=" c

if [ $a -gt $b -a $a -gt $c ]
then
echo "$a is greater"
elif [ $b -gt $a -a $b -gt $c ]
then
echo "$b is greater"
else
echo "$c is greater"
fi
user@user-virtual-machine:~/manojdir/dtr1$ ./conditions.sh
a=5
b=7
c=6
7 is greater
user@user-virtual-machine:~/manojdir/dtr1$ cat case1.sh
#!/bin/bash
read -p "enter no of days under 31: " num

case $num in
"31") echo "jan,mar,may,jly,aug,oct,dec";;
"30") echo "apr,jun,sep,nov";;
"28") echo "feb";;
"29") echo "feb";;
*) echo "Invalid input";;
esac
```

To return to your computer, move the mouse pointer outside or press Ctrl+Alt.

Type here to search

15:37 10-09-2021

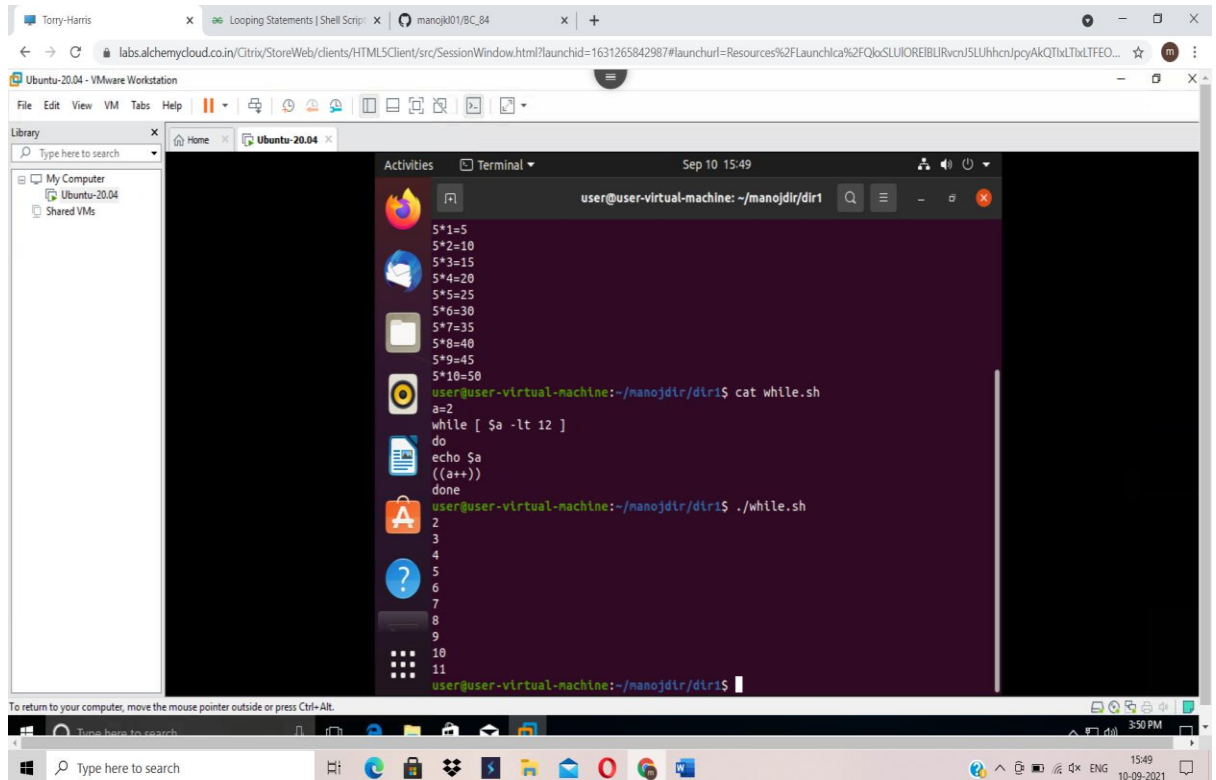

```
user@user-virtual-machine: ~/manojdir/diri/subdir
*) echo "input is invalid";
esac
user@user-virtual-machine:~/manojdir/diri$ ./case1.sh
enter no of days under 31: 29
leap year feb
user@user-virtual-machine:~/manojdir/diri$ cat Aropeg1.sh
#!/bin/bash
b=2
a=3
echo "$((a*b))"
user@user-virtual-machine:~/manojdir/diri$ ./Aropeg1.sh
9
user@user-virtual-machine:~/manojdir/diri$ cd subdir1
bash: cd: subdir1: No such file or directory
user@user-virtual-machine:~/manojdir/diri$ cd subdir
user@user-virtual-machine:~/manojdir/diri/subdir$ ls
eg2.txt  output.txt  places3.txt  prog4.sh  scriptp1.sh
out2.txt  places2.txt  places.txt  result.txt
user@user-virtual-machine:~/manojdir/diri/subdir$ cat prog4.sh
#!/bin/sh
num1=20
num2=30
sum=$((num1+num2))
echo "$sum"
user@user-virtual-machine:~/manojdir/diri/subdir$ ./prog4.sh
50
user@user-virtual-machine:~/manojdir/diri/subdir$ cat scriptp1.sh
#!/bin/sh
#sort -o output.txt places.txt
```

Looping statements:

1) For loop:

```
user@user-virtual-machine:~/manojdir/diri$ ls
Aropeg1.sh  eg1.txt  fact.sh  prog3.sh  shelpro1.sh  until.sh
case1.sh    eg1.txt  file1.txt  revno.sh  subdir       while.sh
conditions.sh  eg2.txt  happy.txt  scriptp1.sh  temp1.txt  withno.txt
denoshell.sh  eg4.txt  mulof.sh  shell10tin.sh  temp3.txt
user@user-virtual-machine:~/manojdir/diri$ cat mulof.sh
#!/bin/bash
for i in {1..10..1}
do
res=$((i * 5))
echo "$i*$i=$res"
done
user@user-virtual-machine:~/manojdir/diri$ ./mulof.sh
5*1=5
5*2=10
5*3=15
5*4=20
5*5=25
5*6=30
5*7=35
5*8=40
5*9=45
5*10=50
user@user-virtual-machine:~/manojdir/diri$
```

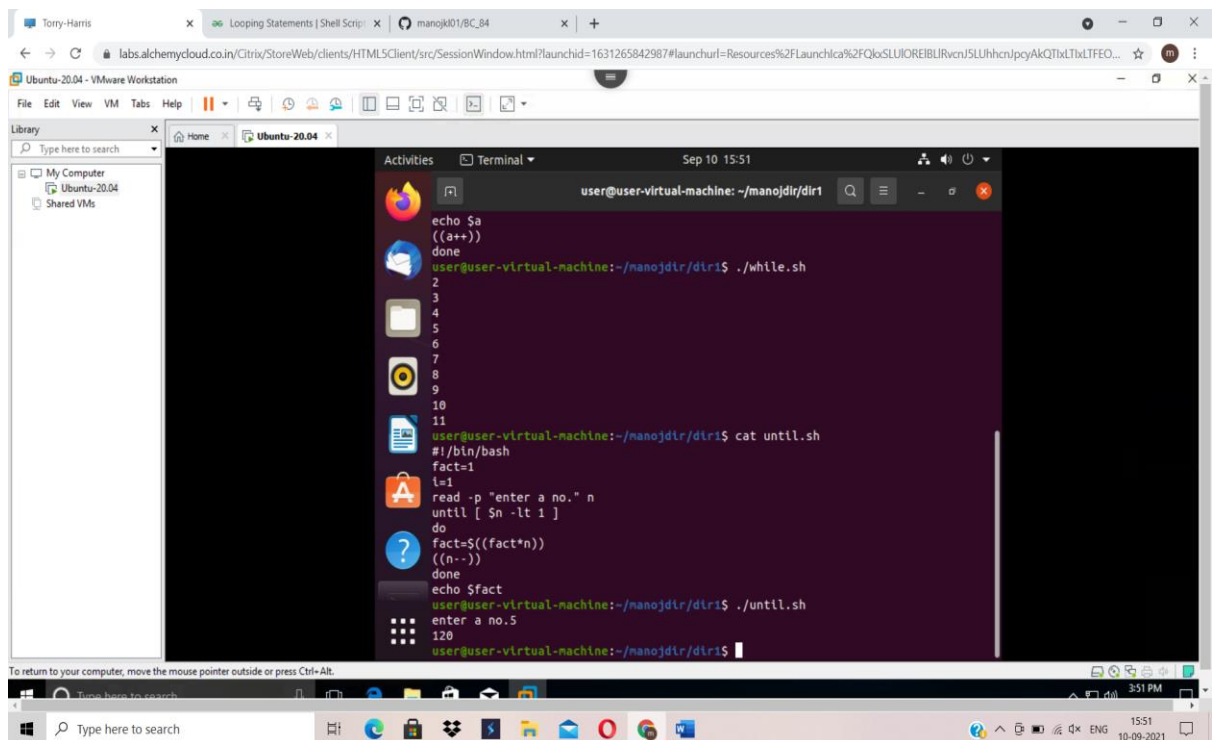
2) While loop:



The screenshot shows a terminal window within a VMware Workstation environment. The terminal displays the following commands and output:

```
5*1=5
5*2=10
5*3=15
5*4=20
5*5=25
5*6=30
5*7=35
5*8=40
5*9=45
5*10=50
user@user-virtual-machine:~/manojdir/1$ cat while.sh
a=2
while [ $a -lt 12 ]
do
echo $a
((a++))
done
user@user-virtual-machine:~/manojdir/1$ ./while.sh
2
3
4
5
6
7
8
9
10
11
user@user-virtual-machine:~/manojdir/1$
```

3) Until loop:



The screenshot shows a terminal window within a VMware Workstation environment. The terminal displays the following commands and output:

```
echo $a
((a++))
done
user@user-virtual-machine:~/manojdir/1$ ./while.sh
2
3
4
5
6
7
8
9
10
11
user@user-virtual-machine:~/manojdir/1$ cat until.sh
#!/bin/bash
fact=1
i=1
read -p "enter a no." n
until [ $n -lt 1 ]
do
fact=$((fact*n))
((i--))
done
echo $fact
user@user-virtual-machine:~/manojdir/1$ ./until.sh
enter a no.5
120
user@user-virtual-machine:~/manojdir/1$
```