Name: Prathamesh Rajendra Sawant

Roll No.: BETB28

Div.: B

Assignment no. 1

Q1.

Ans.

Code:
```
if [ $# -ne 3 ]
then
        echo "$0: Numbers are not entered"
        exit 1
fi
n1=$1
n2=$2
n3=$3
if [ $n1 -gt  $n2 ] && [ $n1 -gt $n3 ]
then
        echo "Number 1 is biggest: $n1"
elif [ $n2 -gt $n1 ] && [ $n2 -gt $n3 ]
then
        echo "Number 2 is biggest: $n2"
elif [ $n3 -gt $n1 ] && [ $n3 -gt $n2 ]
then
        echo "Number 3 is biggest: $n3"
elif [ $1 -eq $2 ] && [ $1 -eq $3 ] && [ $2 -eq $3]
then
echo "All the three numbera are equal"
else
        echo "Unable to determine"
fi
```

Output:

```
prathamesh@prathamesh:~/Documents$ ls
case.sh  menu.sh  prathamesh.sh  script  sum1.sh  sum.sh  threenum.sh
prathamesh@prathamesh:~/Documents$ ./threenum.sh
./threenum.sh: Numbers are not entered
prathamesh@prathamesh:~/Documents$ ./threenum.sh 4 3 7
Number 3 is biggest: 7
prathamesh@prathamesh:~/Documents$ ./threenum.sh 9 8 4
Number 1 is biggest: 9
prathamesh@prathamesh:~/Documents$ ./threenum.sh 6 10 1
Number 2 is biggest: 10
prathamesh@prathamesh:~/Documents$ ./threenum.sh 4 4 3
Unable to determine
prathamesh@prathamesh:~/Documents$ ./threenum.sh 4 4 4
./threenum.sh: line 21: [: missing `]'
Unable to determine
prathamesh@prathamesh:~/Documents$
```

Q2.

Ans.

Code: if test $# = 3

then

      case $2 in

      +) let z=$1+$3;;

      -) let z=$1-$3;;

      /) let z=$1/$3;;

      x|X) let z=$1*$3;;

      *) echo Warning - $2 invalid operator, only +,-,x,/ operator allowed

        exit;;

      esac

      echo Answer is $z

else

      echo "Usage - $0 value1 operator value2"

      echo "   Where, value1 and value2 are numeric values"

      echo "   operator can be +,-,/,x (For Multiplication)"

fi

Output:

```
prathamesh@prathamesh:~/Documents$ ls
case.sh  menu.sh  prathamesh.sh  script  sum1.sh  sum.sh  threenum.sh
prathamesh@prathamesh:~/Documents$ ./case.sh
Usage - ./case.sh value1 operator value2
     Where, value1 and value2 are numeric values
           operator can be +,-,/,x (For Multiplication)
prathamesh@prathamesh:~/Documents$ ./case.sh 4 + 2
Answer is 6
prathamesh@prathamesh:~/Documents$ ./case.sh 4 - 2
Answer is 2
prathamesh@prathamesh:~/Documents$ ./case.sh 4 / 2
Answer is 2
prathamesh@prathamesh:~/Documents$ ./case.sh 4 x 2
Answer is 8
prathamesh@prathamesh:~/Documents$ ./case.sh 4  2
```

Q3.

Ans.

Code: read a

read b

sum=`echo $a + $b | bc -l`

echo "The sum: $sum"

Output:

```
prathamesh@prathamesh:~/Documents$ ls
case.sh  menu.sh  prathamesh.sh  script  sum1.sh  sum.sh  threenum.sh
prathamesh@prathamesh:~/Documents$ ./sum.sh
4
7
The sum: 11
prathamesh@prathamesh:~/Documents$ █
```

Q4.

Ans.

Code:

```
echo "1. To check currently logged user"
echo "2. To check current shell"
echo "3. To check home directory"
echo "4. To check OS type"
echo "6. To check current path"
echo "7. To check number of users logged in"
echo "8. To check About OS and version,release number,kernel version"
echo "Enter your choice"
read choice
case $choice in
1) echo "Currently logged user is"
whoami;;
2)echo "Current shell is $SHELL";;
3)echo "Home Directory is $HOME";;
4)echo "OS Type "
uname -o;;
5)echo "Current path setting $PATH";;
6)echo "Current path is"
pwd;;
7)echo "Number of users logged in"
who -q;;
8)echo "OS Details"
hostnamectl;;
*)echo "Invalid choice"
esac
```

Output:

```
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
1
Currently logged user is
prathamesh
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
2
Current shell is /bin/bash
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
3
Home Directory is /home/prathamesh
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
4
OS Type
GNU/Linux
```

```
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
5
Current path setting /usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin:/usr/games:/usr/local/games:/snap/bin:/snap/bin
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
6
Current path is
/home/prathamesh/Documents
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
7
Number of users logged in
prathamesh
# users=1
prathamesh@prathamesh:~/Documents$ ./menu.sh
1. To check currently logged user
2. To check current shell
3. To check home directory
4. To check OS type
6. To check current path
7. To check number of users logged in
8. To check About OS and version,release number,kernel version
Enter your choice
8
OS Details
 Static hostname: prathamesh
       Icon name: computer-vm
         Chassis: vm
      Machine ID: 284322cecd3d4961b2f3179e3d2373b6
         Boot ID: 99f6a3ee9d474d0d83cf05163bc8845e
  Virtualization: oracle
Operating System: Ubuntu 22.04.1 LTS
          Kernel: Linux 5.15.0-46-generic
    Architecture: x86-64
 Hardware Vendor: innotek GmbH
  Hardware Model: VirtualBox
prathamesh@prathamesh:~/Documents$
```