ASSIGNMENT

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Shell Script

1. Write a shell script to ask your name, and college name and print it on the

screen.

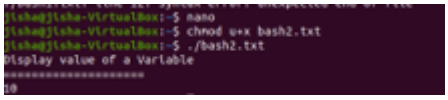
```
#!/bin/bash
echo Enter your name

read name

echo enter your college name

read college

echo details you entered

echo name :$name

echo college name:$college
```

```
Enter your name
enter your college name
details you entered
name : ammu
college name: ajce
```

2. Write a shell script to set a value for a variable and display it on command

line interface.

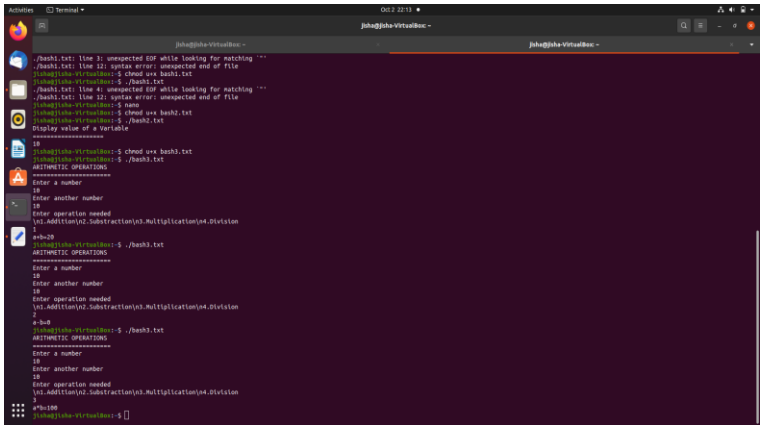
```
#!/bin/bash
echo "Display value of a Variable "
e
a=10
echo "$a"
```



3. Write a shell script to perform addition, substation, multiplication, division

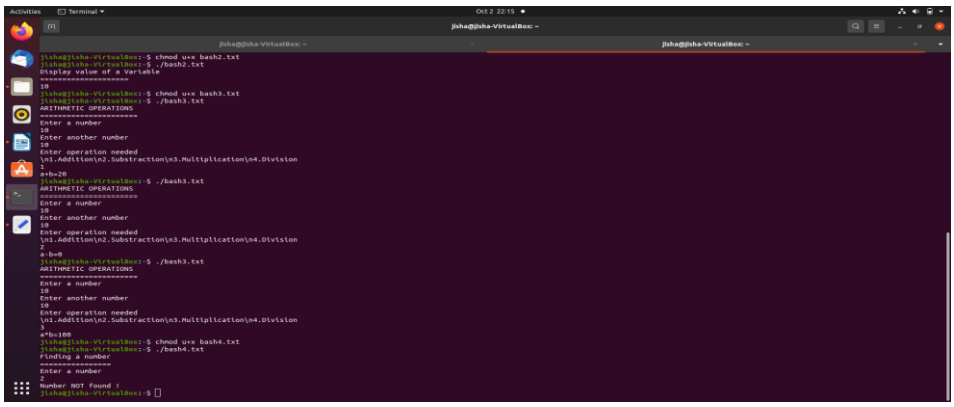
with two numbers that is accepted from user.

```
#!/bin/bash
echo "ARITHMETIC  OPERATIONS"
echo "======================"
echo "Enter a number"
read a
echo "Enter another number"
read b
echo "Enter operation needed"
echo "\n1.Addition\n2.Substraction\n3.Multiplication\n4.Division"
read op
case "$op" in
"1") echo "a+b="$(($a+$b));;
"2") echo "a-b="$(($a-$b));;
"3") echo "a*b="$(($a*$b));;
"4") echo "a/b="$(($a/$b));;
esac
```



4. Write a shell script to check the value of a given number and display whether the number is found or not.

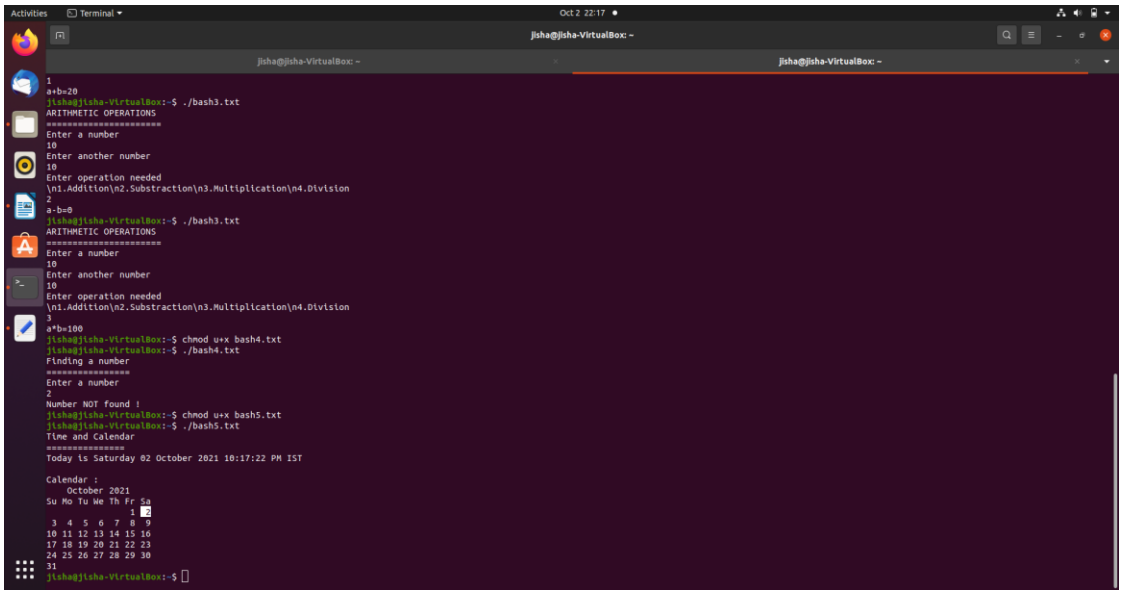
```
#!/bin/bash
echo "Finding a number"
echo "================"
echo "Enter a number"
read a
if [ $a == 10 ]; then
        echo "Number found ;)"
else
        echo "Number NOT found !"
fi
```



5. Write a shell script to display current date, calendar.

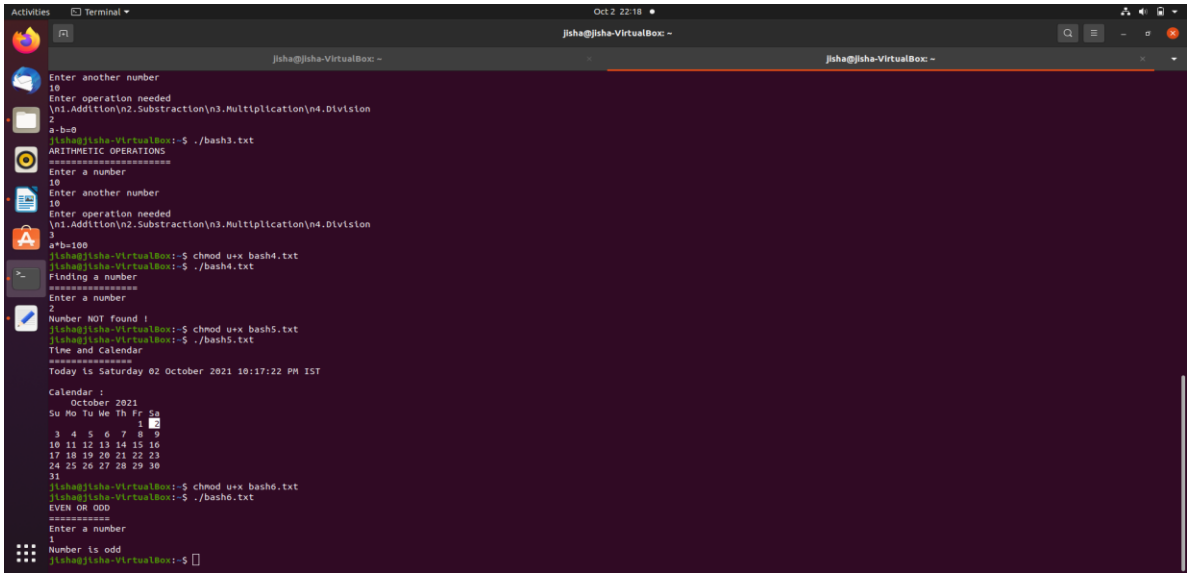
```
#!/bin/bash
echo "Time and Calendar"
echo "================"
```

```
echo "Today is $(date)"
echo ""
echo "Calendar :"
cal
```



6. Write a shell script to check a number is even or odd.

```
#!/bin/bash
echo "EVEN OR ODD"
echo "==========="
echo "Enter a number"
read n
x=$(($n%2))
if [ $x -eq 0 ]; then
  echo "Number is Even"
else
  echo "Number is odd"
fi
```



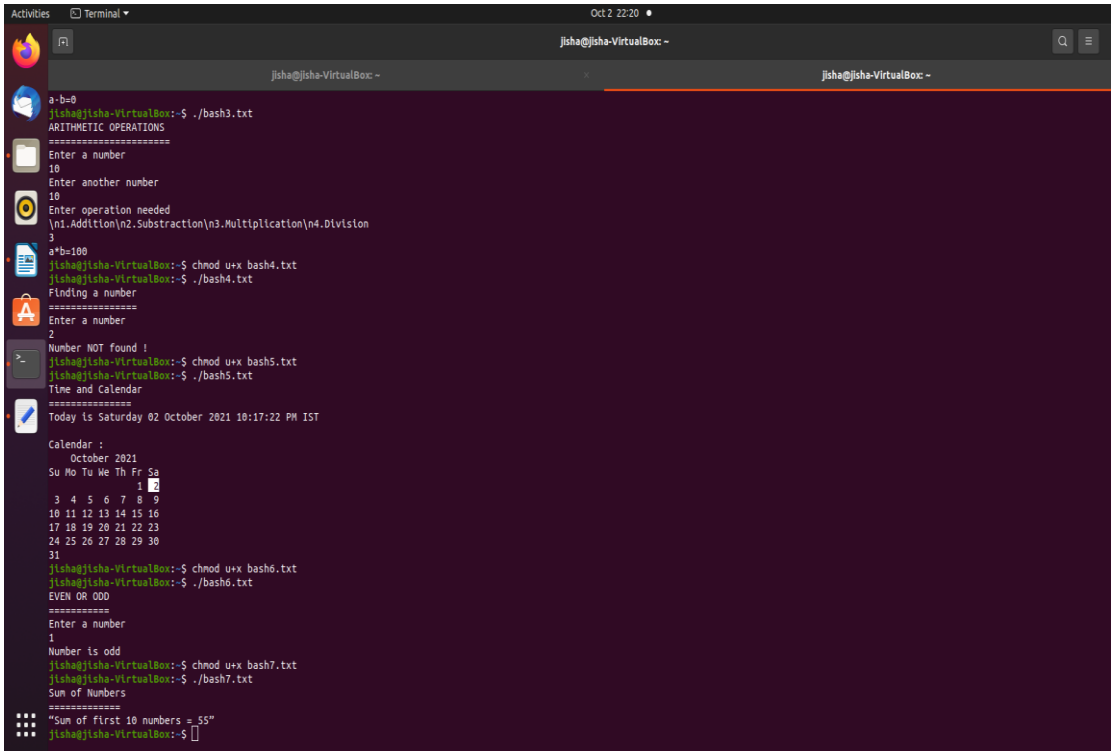
7. Write a shell script to check a number is greater than, less than or equal to another number.

```
#!/bin/bash
echo "Comparing numbers"
echo "================="
echo "Enter first number"
read a
echo "Enter second number"
read b
if [ $a -gt $b ]; then
  echo "$a is greater"
elif [ $b -gt $a ];then
  echo "$b is greater"
else
  echo "Both are Equal"
fi
```

```
bash main.sh
"enter the number"
5
"enter the second number"
5
"5 is equal to 5"
```

8. Write a shell script to find the sum of first 10 numbers.

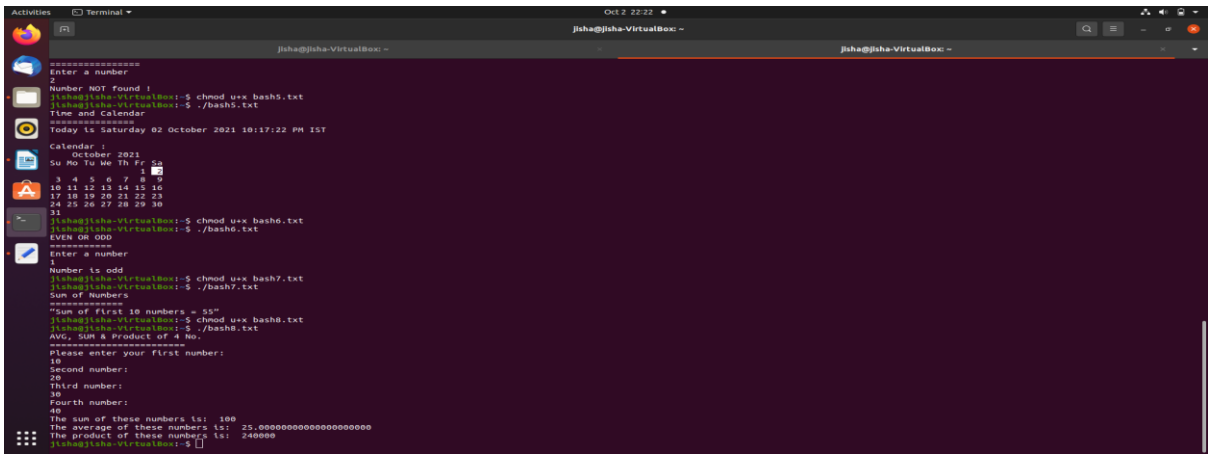
```
#!/bin/bash
echo "Sum of Numbers "
echo "=============="
s=0
for (( i=1;i<=10;i++ ))
do
s=`expr $s + $i`
done
echo “Sum of first 10 numbers = $s”
```



9. Write a shell script to find the sum, the average and the product of the four

integers entered.

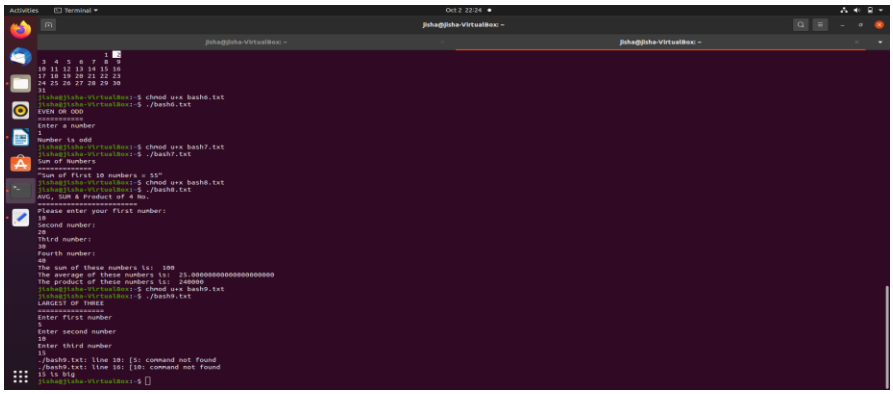
```
#!/bin/bash
echo  "AVG, SUM & Product of 4 No."
echo  "========================="
echo "Please enter your first number: "
read a
echo "Second number: "
read b
echo "Third number: "
read c
echo "Fourth number: "
read d

sum=$(($a + $b + $c + $d))
avg=$(echo $sum / 4 | bc -l )
prod=$(($a * $b * $c * $d))

echo "The sum of these numbers is: " $sum
echo "The average of these numbers is: " $avg
echo "The product of these numbers is: " $prod
```



10. Write a shell script to find the smallest of three numbers.

```
#!/bin/bash

echo "LARGEST OF THREE"
```

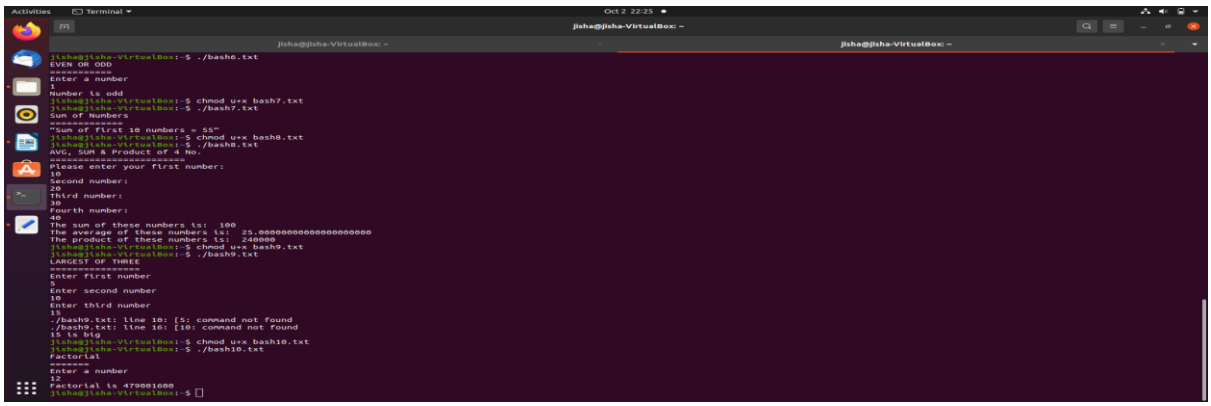
```
echo "================"
echo "Enter first number"
read a
echo "Enter second number"
read b
echo "Enter third number"
read c
if [$a -gt $b]; then
if [$a -gt $c]; then
echo "$a is big"
else
echo "$c is big"
fi
elif [$b -gt $c];then
echo "$b is big"
else
echo "$c is big"
fi
```



11. Write a shell program to find factorial of given number.

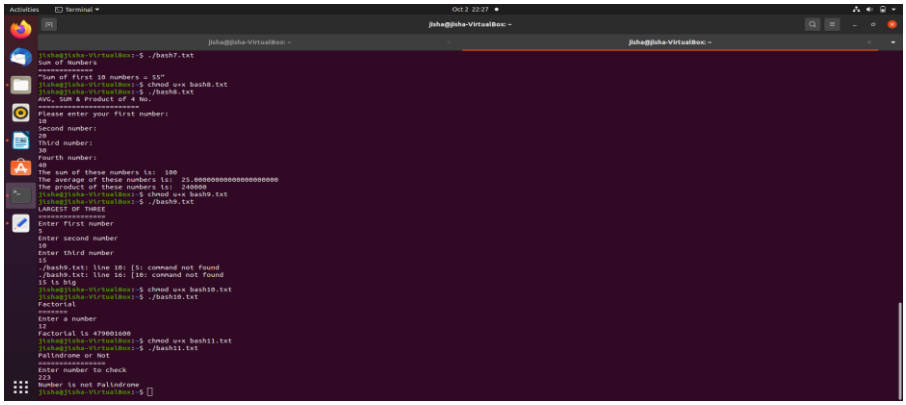
```
#!/bin/bash
echo "Factorial"
```

```
echo "======="
echo "Enter a number"
read num
fact=1

for((i=2;i<=num;i++))
        {
                fact=$((fact * i))  #fact = fact * i
         }
echo "Factorial is $fact"
```



12. Write a shell program to check a number is palindrome or not.

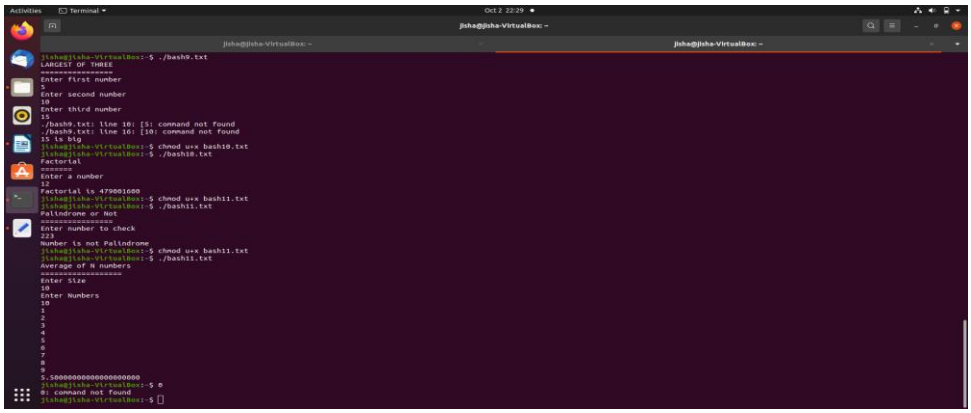
```
#!/bin/bash
echo "Palindrome or Not"
echo "================"
echo "Enter number to check"
read n
rev=$(echo $n | rev)
if [ $n -eq $rev ]; then
     echo "Number is Palindrome"
else
     echo "Number is not Palindrome"
fi
```



13.Write a shell script to find the average of the numbers entered in command

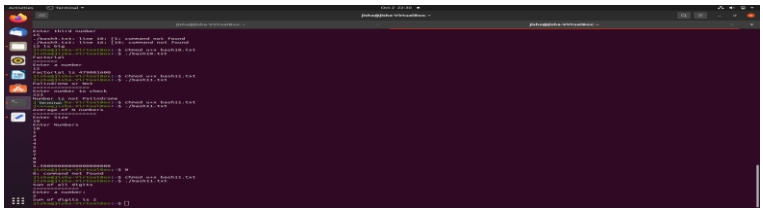
line.

```
#!/bin/bash
echo "Average of N numbers"
echo "==================="
echo "Enter Size"
read n
i=1
sum=0

echo "Enter Numbers"
while [ $i -le $n ]
do
  read num
  sum=$((sum + num))
  i=$((i + 1))
done
avg=$(echo $sum / $n | bc -l)
echo $avg
```



14.Write a shell program to find the sum of all the digits in a number.

```
#!/bin/bash
echo "Sum of all digits"
echo "============="
echo "Enter a number:"
read num
sum=0

while [ $num -gt 0 ]
do
        mod=$((num % 10))
        sum=$((sum + mod))
        num=$((num / 10))
done
echo "Sum of digits is $sum"
```



15.Write a shell Script to check whether given year is leap year or not.

```
#!/bin/bash

echo "LEAP YEAR OR NOT"

echo "==============="

echo "Enter the year"

read y

a=`expr $y % 4`

b=`expr $y % 100`

c=`expr $y % 400`

if [ $a -eq 0 -a $b -ne 0 -o $c -eq 0 ];

then

echo "$y is leap year"
```

else

echo "$y is not leap year"

fi