Ashish Wilson
Roll no:28
S2MCA_A

Shell Scripting Lab Assignments

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

```
#!/bin/sh
echo "Enter your name"
read name
echo "Enter your college name"
read clg
clear
echo "Details you entered"
echo "name=$name"
echo "College Name=$clg"
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg1.sh
Enter your name
ashish
Enter your college name
amal jyothi
```

```
Details you entered
name=ashish
College Name=amal jyothi
ashish@ubuntu:~/Documents/shellscript$
```

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

```
#!/bin/sh
a=40
echo"a: " $a
```

OUTPUT

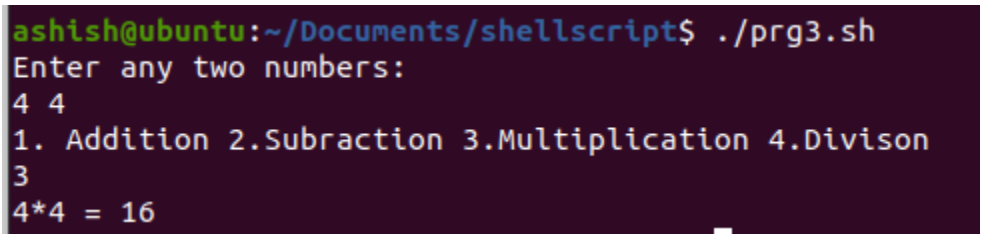
```
ashish@ubuntu:~/Documents/shellscript$ ./prg2.sh
a:  40
```

3. Write a shell script to perform addition, substation, multiplication, division with two numbers that is accepted from user.

```
#!/bin/sh
echo "Enter any two numbers: "
read a b
echo "1. Addition 2.Subraction 3.Multiplication 4.Divison"
read op
case $op in
        "1")echo $a"+"$b" = "`expr $a + $b`;;
        "2")echo $a"-"$b" = "`expr $a - $b`;;
        "3")echo $a"*"$b" = "`expr $a \* $b`;;
        "4")echo $a"/"$b" = "`expr $a / $b`;;
        "*")echo "Please enter a valid value";;

esac
```

OUTPUT



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 "Enter a number"
read num
if [[ $num -eq 12 ]] ; then
        echo "number  found"
        echo $num
```

```
else
        echo "number not found"
        echo $num
fi
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg4.sh
Enter a number
12
number  found
12
```

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

```
#!/bin/sh
echo "today Date:$(date)"
echo "Calander"
cal
```

OUTPUT

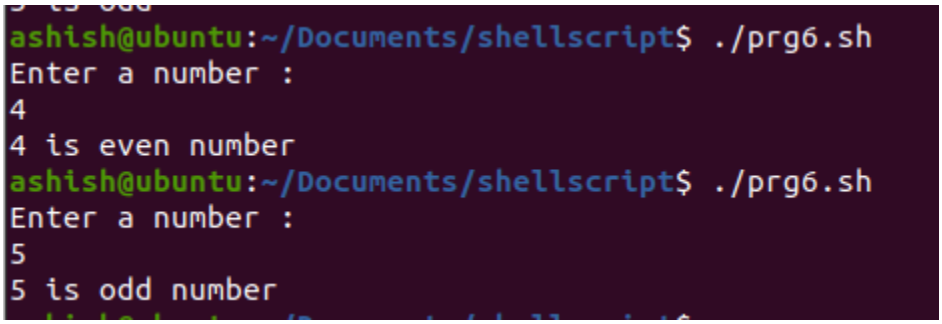
```
ashish@ubuntu:~/Documents/shellscript$ ./prg5.sh
today Date:Sat 02 Oct 2021 02:17:21 AM PDT
Calander
    October 2021
Su Mo Tu We Th Fr Sa
                1  2
 3  4  5  6  7  8  9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31
```

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

```
#!/bin/sh
echo "Enter a number : "
read n
rem=$(( $n % 2 ))
```

```
if [ $rem -eq 0 ]
then
  echo "$n is even number"
else
  echo "$n is odd number"
fi
```

OUTPUT



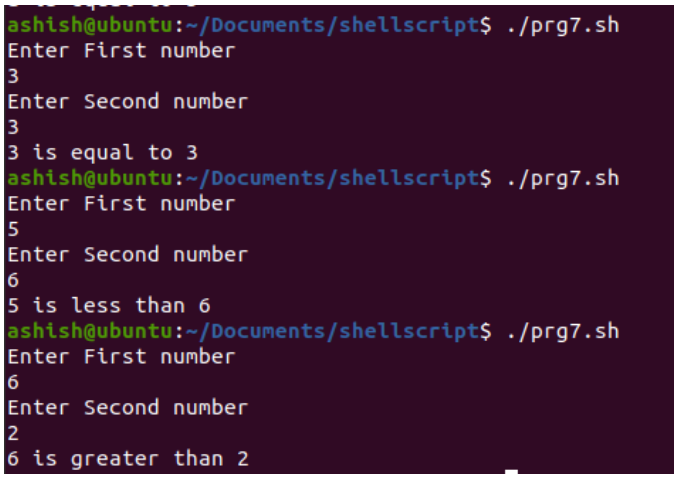
7. Write a shell script to check a number is greater than, less than or equal to another number.

```
#!/bin/sh
echo "Enter First number"
read a
echo "Enter Second number"
read b
if [ $a -eq $b ]
then
   echo "$a = $b"
elif [ $a -gt $b ]
then
   echo "$a is greater than $b"
else
```

```
  echo "$a is less than $b"

fi
```

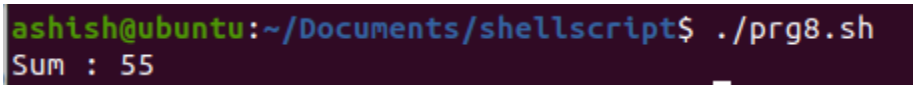
OUTPUT



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

```
#!/bin/bash
sum=0
for((i=0;i<10;i++))
do
        ((sum+=i))
done
echo "Sum : $sum"
```

OUTPUT



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

```
#!/bin/sh
echo "Enter any four Integers "
read a
read b
read c
```

```
read d
sum=`expr $a + $b + $c + $d`
echo "The sum = $sum"
echo "Average =`expr $sum / 4`"
echo "Product =`expr $a \* $b \* $c \* $d`"
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg9.sh
Enter any four Integers
5
7
3
8
The sum = 23
Average =5
Product =840
```

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

```
#!/bin/sh
echo "Enter three numbers "
read a b c
s=$a
if [ $b -lt $s ]
then
s=$b
fi
if [ $c -lt $s ]
then
s=$c
fi
echo Smallest of $a $b $c is $s
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg10.sh
Enter three numbers
4 2 6
Smallest of 4 2 6 is 2
```

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

```
#!/bin/bash
echo "Enter a number"
read num
fact=1
while [ $num -gt 1 ]
do
fact=$((fact * num))
num=$((num - 1))
done
echo Factorial=$fact
```

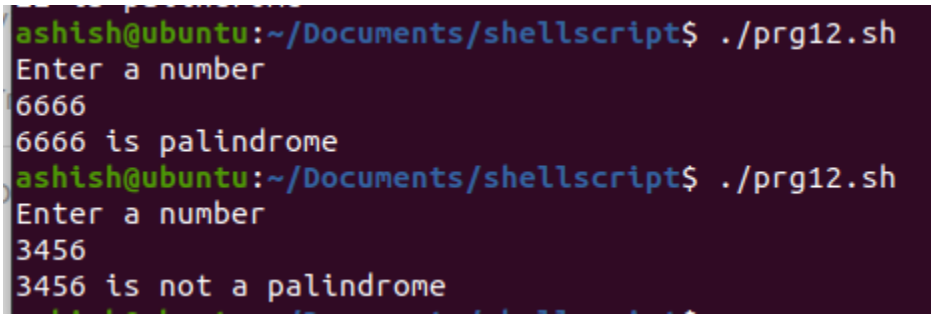
OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg11.sh
Enter a number
4
Factorial=24
```

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

```
#!/bin/sh
echo "Enter a number "
read a
rev=$(echo $a | rev)
if [ $a -eq $rev ] ; then
        echo "$a is palindrome"
else
        echo "$a is not a palindrome"
fi
```

OUTPUT



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

```
#!/bin/sh
echo "Enter number of Integers"
read n
i=1
sum=0
echo "Enter $n numbers: "
while [ $i -le $n ]
do
        read num
        sum=$((sum+num))
        i=$((i+1))
done
echo "Average :`expr $sum / $n`"
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg13.sh
Enter number of Integers
6
Enter 6 numbers:
4
2
2
8
8
4
Average :4
```

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

```
#!/bin/sh
echo "Enter a number: "
read n
s=0
while [ $n -gt 0 ]
do
        mod=$((n % 10))
        s=$((n + mod))
        n=$((n / 10))
done
echo "Sum of digits is $s"
```

OUTPUT

```
ashish@ubuntu:~/Documents/shellscript$ ./prg14.sh
Enter a number:
3455
Sum of digits is 6
```

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

```
#!/bin/sh
echo  "Enter a year:"
read year
if [ `expr $year % 4` -eq 0 ]
then
        echo "$year is a leap year"
else
        echo "$year is not a leap year"
fi
```