1.Write a shell script program to display “HELLO WORLD”.

2. Write a Program to Find Factorial of Number.

3.Write a shell script to find the largest among the 3 given numbers

4.Write a shell script program to develop a calculator.

5. Write a shell script to find how many terminals has this user logged in

6. Write a shell script to find reverse of a file.

7. Write a shell Script program to check whether the given number is even or odd.

8.Shell script program to check whether given file is a directory or not.

9. Shell script program to count number of files in a Directory.

10.write a shell script to reverse a number

1.Write a shell script program to display “HELLO WORLD”.

```
#!/bin/bash
# My first script

echo "Hello World!"
```

2. Write a Program to Find Factorial of Number

```
echo "Enter the no"
read fact

ans=1
counter=0
while [ $fact -ne $counter ]
do
        counter=`expr $counter + 1`
        ans=`expr $ans \* $counter`
done
echo " Factorial is $ans"

------------------------------------------------------------------
output
------------------------------------------------------------------
```

```
Enter the no
5
 Factorial is 120
```

3.Write a shell script to find the largest among the 3 given numbers

```
echo Enter 3  numbers with spaces in between
read a b c
l=$a
if [ $b -gt $l ]
then
l=$b
fi
if [ $c -gt $l ]
then
l=$c
fi
echo Lagest of $a $b $c is $l
```

4.Write a shell script program to develop a calculator.

```
clear
sum=0
i="y"

echo " Enter one no."
read n1
echo "Enter second no."
read n2
while [ $i = "y" ]
do
echo "1.Addition"
echo "2.Subtraction"
echo "3.Multiplication"
echo "4.Division"
echo "Enter your choice"
read ch
case $ch in
    1)sum=`expr $n1 + $n2`
     echo "Sum ="$sum;;
        2)sum=`expr $n1 - $n2`
     echo "Sub = "$sum;;
    3)sum=`expr $n1 \* $n2`
     echo "Mul = "$sum;;
    4)sum=`expr $n1 / $n2`
     echo "Div = "$sum;;
    *)echo "Invalid choice";;
esac
```

```
echo "Do u want to continue ?"
read i
if [ $i != "y" ]
then
   exit
fi
done
```

```
OUTPUT
***********
[04mca58@LINTEL 04mca58]$ sh calculator.sh
Enter any no.
121
 Enter one no.
 21
 Enter second no.
 58
 1.Addition
 2.Subtraction
 3.Multiplication
 4.Division
 Enter your choice
 1
 Sum =79
 Do u want to continue ?
 y
 1.Addition
 2.Subtraction
 3.Multiplication
 4.Division
 Enter your choice
 2
 Sub = -37
 Do u want to continue ?
 y
 1.Addition
 2.Subtraction
 3.Multiplication
 4.Division
 Enter your choice
 3
 Mul = 1218
 Do u want to continue ?
 y
 1.Addition
 2.Subtraction
 3.Multiplication
 4.Division
 Enter your choice
 4
 Div = 0
 Do u want to continue ?
 n
```

5.Write a shell script to find how many terminals has this user logged in

```
if [ $# -eq 1 ]
   then
         who>user.lst
         echo "$1 User is logeed at "
         grep -c $1 user.lst
   else
         echo "Pls enter User Name"
   fi
```

OUTPUT:

```
   $ sh15 testuser
        testuser User is logeed at 1
```

6. Write a shell script to reverse the contents of a file

```
if [ $# -eq 1 ]
   then
      if [ -f $1 ]
         then
         a=`rev $1`
         echo "Reverse of $1"
            cat $1
         echo " is-> $a"else
         echo "File does not exist '
         fi

   else
      echo "Please enter file name or path"
   fi
```

OUTPUT:

```
   $ sh35  wordfile1
   Reverse of
   apple
   mango
   banana
   chicko
   is-> elppa
   ognam
   ananab
   okcihc
$ sh10 sh9
```

```
-rwxrwxrwx  1 root     Everyone     262 Dec  7 18:48 sh9
$ sh10 /etc
total 813
```

7. Write a shell Script program to check whether the given number is even or odd.

```
echo -n "Enter numnber : "

read n

rem=$(( $n % 2 ))

if [ $rem -eq 0 ]

then

  echo "$n is even number"

else

  echo "$n is odd number"

fi
```

8.Shell script program to check whether given file is a directory or not

```
echo -n "Please enter Directory name you wish to search: "
read dir

for filename in "/home/me/Desktop/$dir"/*

do

   if (-F $filename)
   then
   echo $filename

   fi
done
```

9.Shell script program to count number of files in a Directory.

```
#!/bin/sh
if [ -d "$@" ]
```

```
then
find "$@" -type f | ls -l "$@" | wc -l | echo "Number of files is $@"
find "$@" -type d | ls -l "$@" | wc -l | echo "Number of directories is $@"
fi
```

10. Shell program to reverse a number

```
if [ $# -eq 1 ]
       then
           if [ $1 -gt 0 ]
           then
              num=$1
              sumi=0
              while [ $num -ne 0 ]
              do
              lnum=`expr $num %  10`
              sumi=`expr $sumi * 10 + $lnum`
              num=`expr $num \/ 10`
              done
              echo "Reverse of digits is  $sumi of $1"else
              echo " Number is less than 0"
            fi
   else
         echo "Insert only one parameter "
   fi
```

---

output:

```
      $ sh1 23456
      Reverse of digits is 65432 of   23456
```