

Lab - 5

1. Shell script to find the factorial of a number

```
echo "Enter n"
```

```
read n
```

```
f=1
```

```
while [ $n -gt 1 ]
```

```
do
```

```
f=$((f * n))
```

```
n=$((n - 1))
```

```
done
```

```
echo $f
```

O/P:

Enter n

5

120

2. Shell script to compute salary

Hra = 20% , da = 10%

```
echo "Enter basic salary"
```

```
read basic
```

```
da = 'expr $basic \* 10 / 100'
```

```
hra = 'expr $basic \* 20 / 100'
```

```
gross = 'expr $basic + $hra + $da'
```

```
echo "gross"
```

O/P:

Enter basic salary

1000

1300

3. Fahrenheit to Celsius.

```
echo "Enter temp = "
read temp
c = 'echo $temp - 32 | bc'
cc = 'echo $c | x 5/9 | bc'
echo "$cc"
```

O/P:

Enter the temp

30

-1

4. Switch case for arithmetic operators

```
echo "Enter 2 nos: "
```

```
read a
```

```
read b
```

```
echo "Enter choice"
```

```
read choice
```

```
case $choice in
```

```
"1")
```

```
c = 'expr $a + $b'
```

```
echo "$c";;
```

```
"2")
```

```
d = 'expr $a - $b'
```

```
echo "$d";;
```

```
"3")
```

```
e = 'expr $a | x $b'
```

```
echo "$e";;
```

```
"4")
```

```
f='expr $a / $b'
```

```
echo "$f";;
```

```
esac
```

O/P:

Enter 2 no's

2
5

Enter choice

1

+

5. To find the sum of even numbers

```
echo "Enter n"
```

```
i=2
```

```
while [ $i -le $n ]
```

```
do
```

```
sum=$((sum+i))
```

```
i=$((i+2))
```

```
done
```

```
echo "$sum"
```

O/P:

Enter n: 7

12

6. To find power of number n

```
echo "Enter n"  
read n  
echo "Enter power"  
read p  
res = 'echo $n ^ $p | bc'  
echo "$res"
```

O/P:

Enter n: 2

Enter power: 4

16

7. To find sum of n natural no.

```
echo "Enter n"  
read n  
i = 1  
sum = 0  
while [ $i -le $n ]  
do  
    sum = 'expr $sum + $i'  
    i = $(($i+1))  
done  
echo "$sum"
```

O/P:

Enter n: 10

55