## LAB-4.

**1P.** Find the factorial of a number.

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

output :- Enter a number 3
                    6.

**2P.** Take two numbers and do arthematic Operati

```
#!/bin/bash.
echo "Enter two numbers"
read a
read b
echo " Addition is: $(( $a + $b))"
echo " Sub is : $(( $a - $b))"
echo " Mul is: $(( $a * $b ))"
echo " div is: $(( $a \ $b))"
```

output :-      10
                    5
        Addition is: 15

Sub is : 5

Mul is : 50

Div is : 2.

3P. Sum of even numbers upto n.

```bash
#!/bin/bash.
echo "enter a number"
read num
i=2
while [ $i -le $num ]
do
Sum=$(( $sum + $i ))
i=$(( $i + 2 ))
done
echo "Answer : $sum"
```

output:- Enter a number.

10

Answer : 30

4P. Compute power of a number.

```bash
#!/bin/bash.
echo " Enter a number."
read num.
echo " Enter a base "
read power.
Mul=1
while [ $pow -gt 0]
do
```

```
mul=$(($num * $mul))
pow=$(($pow-1))
done
echo $mul.
```

output:- Enter a number : 2.
Enter the power : 3
8.

5P.
```
#!/bin/bash
echo "Enter a option"
read op
case "$op" in
"Y"|"y"|"Yes"|"yes"|"YES") echo "Valid Option";;
"N"|"No"|"NO"|"no") exit 1;;
*) echo "Invalid Option";;
esac.
```

output:- Enter a option
y
valid option.

29/11/22