**Practical 8**

Q1) **Fibbonanci series**

**output**: 0 1 1 2 3 5 8 13 21 34

**code:**

read -p "Enter the number:" num

a=0

b=1

for((i=0;i<=num;i++))

do

echo $a

c=$(($a+$b))

a=$b

b=$c

done

output:

Enter the number

10

0

1

1

2

3

5

8

13

21

34

55

Q2)**Factorial**

**output** : Factorial of 5 is:120

**code**:

read -p "enter a number of fact:" num

fact=1

for((i=1;i<=$num;i++))

do

fact=$((fact\*i))

done

echo "Factorial of 5 is" $fact

**output:**

[2021ict109@fedora ~]$ vi a.sh

[2021ict109@fedora ~]$ ./a.sh

Factorial of 5 is 120

Q3)**Multiples of 3 between 1 to 50:**

**output** : 3 6 9 12 15....48

**code**:

for((i=1;i<=50;i++))

do

c=$(($i%3))

if [ "$c" -eq 0 ];then

echo $i

fi

done

or

for((i=1;i<=50;i++))

do

c=$(($i\*3))

if [ "$c" -le 50 ];then

echo $c

fi

done

**output:**

[2021ict109@fedora ~]$ vi b.sh

[2021ict109@fedora ~]$ ./b.sh

3

6

9

12

15

18

21

24

27

30

33

36

39

42

45

48