**Practical No:-** 5

**Title:** Write simple Python program to demonstrate use of looping statements.

**Roll No.:**15 **Batch-** A **Date of Performance:** 18/01/2024

**Exercise-**



i=1

while i<=4:

pattern="\*"

print(pattern\*i)

i+=1



rows = 3

for i in range(0,rows):

print(" "\*(rows-i),"\*"\*(2\*i+1))

for i in range(rows-2,-1,-1):

print(" "\*(rows-i),"\*"\*(2\*i+1))

rows = 4

for i in range(rows, 0, -1):

for j in range(rows - i):

print(" ", end="")

for k in range(2 \* i - 1):

if k % 2 == 0:

print("1", end="")

else:

print("0", end="")

print()



x=2

while(x<=101):

print(x)

x+=2

* **o/p**

2 4 6 ……. 100



sum=0

for i in range(1,11):

sum=sum+i

print("Sum of 1st 10 natural numbers=",sum)

* **o/p**

Sum of 1st 10 natural numbers= 55

num=int(input("Enter number to generate Fibonacci-"))

a=0

b=1

for i in range(1,num+1):

print(a,end=" ")

next=(a+b)

a=b

b=next

* **o/p**

Enter number to generate Fibonacci-5

0 1 1 2 3

num=int(input("Enter a number-"))

fact=1

for i in range(1,num+1):

fact=fact\*i

print("Factorial of",num,"=",fact)

* **o/p**

Enter a number-6

Factorial of 6 = 720

num=int(input("Enter a number-"))

original=num

rev=0

while(num>0):

digit=num%10

rev=((rev\*10)+digit)

num=num//10

print("Reversed of",original,"=",rev)

* **o/p**

Enter a number-7332

Reversed of 7332 = 2337



num=int(input("Enter a number-"))

a=num

sum=0

while(num>0):

digit=num%10

sum=(sum+digit)

num=num//10

print("Sum of",a,"=",sum)

* **o/p**

Enter a number-986

Sum of 986 = 23



num=int(input("Enter a number-"))

original=num

rev=0

while(num>0):

digit=num%10

rev=((rev\*10)+digit)

num=num//10

print("Reversed of",original,"=",rev)

if(original==rev):

print(original,"is a palindrome.")

else:

print(original,"is not a palindrome.")

* **o/p**

Enter a number-909

Reversed of 909 = 909

909 is a palindrome.



start, end, columns = 1, 100, 10

for row in range(start, columns + 1):

for col in range(row, end + 1, columns):

print(col, end="\t")

print()

* **o/p**

1 11 21 31 41 51 61 71 81 91

..

. .

10 20 30 40 50 60 70 80 90 100