**PROGRAMS ON CONTROL STATEMENTS**

**EX NO :4A** **WRITE THE PROGRAM TO FIND THE SUM OF THE SERIES 1!+2!+3!+….+N!**

**DATE:07.01.23**

**PROGRAM:**

n=int(input("enter a number"))

fact=1

if(n==0):

fact=1

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

fact=fact\*i

print("the factorial value is",fact)

**OUTPUT:**

enter a number5

the factorial value is 120

**EX NO:4B TO FIND THE SUM OF SERIES 9+99+999+….+N**

**DATE: 07.01.23**

**PROGRAM:**

n=int(input("enter the range of number:"))

sum=0

p=9

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

sum+=p

p=(p\*10)+9

print("the sum of the series=",sum)

**OUTPUT:**

enter the range of number:7

the sum of the series= 11111103

**EX NO:4C REVERSE PYRAMID OF NUMBERS**

**DATE:07.01.23**

**PROGRAM:**

n=int(input("enter the number"))

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

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

print(j,end='')

print("")

**OUTPUT:**

enter the number6

1

21

321

4321

54321

654321

**EX NO:4D RIGHT START PATTERN OF STAR**

**DATE:07.01.23**

**PROGRAM:**

n=int(input("enter the number"))

for i in range(0,n+1):

for j in range(0,i+1):

print("\*",end='')

print("\r")

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

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

print("\*",end='')

print("\r")

**OUTPUT:**

enter the number5

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**EX NO:4E PRINT ALL THE LEAP YEAR FROM 1900-2000**

**DATE:07.01.23**

**PROGRAM:**

start=int(input("enter the number"))

end=int(input("enter the number"))

years=[]

for year in range(start,end+1):

if year%400==0:

years.append(year)

elif year%4==0 and year%100!=0:

years.append(year)

print(years)

**OUTPUT:**

enter the number1900

enter the number2000

[1904, 1908, 1912, 1916, 1920, 1924, 1928, 1932, 1936, 1940, 1944, 1948, 1952, 1956, 1960, 1964, 1968, 1972, 1976, 1980, 1984, 1988, 1992, 1996, 2000]