EXPT. NO. :04 1.NUMBER SERIES

11-01-2023

1.1:- SUM OF SERIES 1!+2!+3!+…..+n!

INPUT:-

n=int(input("Enter the number:"))

Sum=0

fact=1

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

fact=fact\*i

Sum=Sum+fact

print(Sum)

OUTPUT:-

Enter the number:10

4037913

Enter the number:5

153

1.2: SUM OF SERIES 9+99+999+9999+……+n

INPUT:-

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:8

The sum of the series = 111111102

Enter the range of number:6

The sum of the series = 1111104

2. NUMBER PYRAMID-REVERSE PYRAMID

OUTPUT:-

n=int(input("Enter the number: "))

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

print()

for j in range(1,i):

print(j,end=" ")

OUTPUT:-

Enter the number: 5

Enter the number: 5

1 2 3 4 5

1 2 3 4

1 2 3

1 2

1

3. PYRAMID PATTERN-STAR PATTERN

INPUT:-

n=int(input("Enter the number: "))

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

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

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

print()

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

for j in range(n-i):

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

print()

OUTPUT:-

Enter the number: 5

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4. LEAP YEAR OF 1900-2000:-

INPUT:-

n=int(input("Enter the number: "))

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

print()

for j in range(1,i):

print(j,end=" ")

OUTPUT:-

Enter the year:2000

Enter the year:1900

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