I. Number series

Write a program to find the sum of series 1/2!+2/3!+3/5!+4/6!+.....N/(N+1)! Write a Program to print the Fibonacci series.

**PROGRAM:**

num=int(input(“enter your limit:”)) res = 0 fact = 1 for i in range(1, num+1): fact \*= i res = res + (i/ fact) print(“the sum of the series is :”,res)

## OUTPUT:

enter your limit:10

the sum of the series is : 2.7182815255731922

II. Number Pyramid - Inverted Pyramid pattern with the same digit

## PROGRAM:

rows = 5 num = rows for i in range(rows, 0, -1): for j in range(0, i): print(num, end="") print("\r")

## OUTPUT:

**55555**

**5555**

**555**

**55**

**5**

III. Pyramid Pattern - Right down mirror star Pattern

# PROGRAM:

n=int(input("Enter the number of rows:")) space=0 for i in range(n): for j in range(space): print("",end=" ") space=space+1 for k in range(n-i,0,-1): print( "\*",end=" ") print(" ")

## OUTPUT:

**Enter number of rows:5**

* **\* \* \* \***
* **\* \* \***
* **\* \***
* **\***

IV. Reversing a Number

# PROGRAM:

num = int(input("enter a number:")) reversed\_num = 0 while (num != 0): digit = num % 10 reversed\_num = reversed\_num \* 10 + digit num //= 10

print("Reversed Number:"+ str(reversed\_num))

# OUTPUT:

enter a number:345

Reversed Number:543