**INPUT**

# WAP to create and display upto n prime series (Ripunjay, Manasvi)

limit = int(input("Enter the limit : "))

print("The prime number series is as follows :- ")

for i in range(2,limit+1) :

for j in range(2,i) :

if i % j == 0 :

break

else :

print(i , end = ' , ')

**OUTPUT**

Enter the limit : 10

The prime number series is as follows :-

2 , 3 , 5 , 7

**INPUT**

# 1 + x + x^2/ﮮ2 + x^3/ﮮ3 + ....... (Ripunjay, Manasvi)

x = int(input("Enter the series number : "))

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

sum = 0

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

fact = 1

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

fact = fact \* j

term = (x\*\*i)/fact

sum = sum + term

print("sum of",n,"terms of series is =" , sum)

**OUTPUT**

Enter the series number : 2

Enter the number of terms : 20

sum of 20 terms of series is = 4.3099804121821766e-13

**INPUT**

# 1 - x/∠1 + x^2/∠3 - x^3/∠5 + ..... ± x^n /∠2n-1 (Ripunjay, Manasvi)

x = int(input("Enter a Number : "))

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

sum = 1

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

fact = 1

for j in range(1 , 2\*i) :

fact = fact \* j

term = x\*\*i/fact

if i%2 == 0 :

sum = sum + term

else :

sum = sum - term

print("Sum of Series = " , sum)

**OUPUT**

Enter a Number : 2

Enter the Limit : 2

Sum of Series = -0.33333333333333337

**INPUT**

# pyramidal numbers (Ripunjay, Manasvi)

n = int(input("Enter the number of rows = "))

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

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

print(end=" ")

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

print(j , end=" ")

for j in range(2 , i+1) :

print(j , end=" ")

print()

**OUTPUT**

Enter the number of rows = 5

1

2 1 2

3 2 1 2 3

4 3 2 1 2 3 4

5 4 3 2 1 2 3 4 5

**INPUT**

# To find the factorial of a number(Ripunjay,Manasvi)

a = int(input("Enter the number for factorial : "))

fact = 1

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

fact = fact\*i

print("Factorial of",a,"is", fact)

OUTPUT

Enter the number for factorial : 5

Factorial of 5 is 120