**EXPERIMENT** 4 DATE:11/01/23

***I NUMBER SERIES***

**A.Write a program to find the sum of series 1+3+5+7..+N.**

PROGRAM

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

sum=0

i=1

while(i<=n):

sum+=i

i+=2

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

OUTPUT

Enter the range of number:3

The sum of the series = 4

**B Write a program to find the sum of series 1+2+3..+N.**

PROGRAM

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

sum1=0

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

sum1=sum1+(i)

print("The sum of series is",round(sum1,2))

OUTPUT

Enter the number of terms: 4

The sum of series is 10

**II Number Pyramid - Alternate numbers pattern using while loop**

PROGRAM

rows = 6

for i in range(rows):

# nested loop

for j in range(i):

print(i, end=' ')

print('')

OUTPUT

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

**III. Pyramid Pattern - Equilateral triangle pattern of star**

PROGRAM

rows = 5

for i in range(0, rows):

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

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

print("\r")

OUTPUT

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**IV. Print all the prime numbers from 1 -50**

PROGRAM

lower = 1

upper = 50

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):

# all prime numbers are greater than 1

if num > 1:

for i in range(2, num):

if (num % i) == 0:

break

else:

print(num)

OUTPUT

Prime numbers between 1 and 50 are:

2

3

5

7

11

13

17

19

23

29

31

37

41

43

47