**1)a)Sum of the series**

**Program:**

n=int(input("Enter the no:"))

sum=0

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

sum+=i

print("sum of the series(1+3+5+7+....+n",sum)

**Output:**

Enter the no:12

sum of the series(1+3+5+7+....+n 1

sum of the series(1+3+5+7+....+n 4

sum of the series(1+3+5+7+....+n 9

sum of the series(1+3+5+7+....+n 16

sum of the series(1+3+5+7+....+n 25

sum of the series(1+3+5+7+....+n 36

>>>

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**b)Sum of the series 1+2+3+…N**

**Program:**

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

sum=0

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

sum+=i

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

**Output:**

Enter the number:7

sum of the series is 1

sum of the series is 3

sum of the series is 6

sum of the series is 10

sum of the series is 15

sum of the series is 21

sum of the series is 28

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**2)Program using while loop**

**Program:**

rows=5

i=1

while i<=rows:

j=1

while j<=i:

print((i\*2-1),end=" ")

j=j+1

i=i+1

print(' ')

**Output:**

1

3 3

5 5 5

7 7 7 7

9 9 9 9 9

>>>

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**3)Pyramid program:**

**Program:**

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(1,i+1):

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

for j in range (1,i):

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

print()

**Output:**

Enter the number of rows:6

\*

\* \* \*

\* \* \* \* \*

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

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

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

>>>

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**4)Print prime numbers from 0 to 50**

**Program:**

a=0

b=50

print("Prime numbers between",a,"and",b,"are:")

for num in range(a,b+1):

if num>1:

for i in range(2,num):

if(num%i)==0:

break

else:

print(num)

**Output:**

Prime numbers between 0 and 50 are:

2

3

5

7

11

13

17

19

23

29

31

37

41

43

47

>>>

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