Ex 4. Programs on Control Statements

# I.a.Write a program to find the sum of series 1+3+5+7..+N. Program:

n=int(input("Enter n value:"))

sum=0 i=0 temp=1 while i<n:

sum+=temp temp+=2 i+=1

print(sum)

Ouput:

Enter n value:4 16

# I.b.Write a program to find the sum of series 1+2+3..+N. Program:

n=int(input("Enter n value:")) sum=0

i=1

while i<=n: sum+=i i+=1

print(sum)

Output:

Enter n value:5 15

# Number Pyramid - Alternate numbers pattern 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

# Pyramid Pattern - Equilateral triangle pattern of star

Program:

n=int(input("Enter n value:")) for i in range(1,7):

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

print('\* '\*(i))

n-=1

# Output:

Enter n value:5

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# Print all the prime numbers from 1–5 Program:

lower=1 upper=50

print("Prime numbers between", lower, "and", upper, "are:") for i in range(lower, upper + 1):

if i > 1:

for j in range(2, i):

if (i% j== 0):

break

else:

print(i,end=”,”)

# Output:

Prime numbers between 1 and 50 are: 2,3,5,7,11,13,17,19,23,29,31,37,41,43,47