PROGRAMS USING CONTROL STATEMENTS

1. NUMBER SERIES

CODE:

#program to print series 0 2 6 12 20 30 42…N

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

i=1

while i<=n:

print((i\*i)-i,end=" ")

i+=1

OUTPUT:

Enter the range of number:7

0 2 6 12 20 30 42

CODE:

#program to print series 0 2 8 14 24 34…N

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

i=1

pr=0

while i<=n:

if(i%2==0):

pr=pow(i, 2) - 2

print(pr,end=" ")

else:

pr = pow(i, 2) - 1

print(pr, end=" ")

i+=1

OUTPUT:

Enter the range of number(Limit):7

0 2 8 14 24 34 48

2. NUMBER PATTERN

CODE:

#program to print number pattern using for loop

n=5

for num in range(n+1):

for i in range (num ):

print(num,end= " ")

print("\r")

OUTPUT:

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

3. PYRAMID PATTERN

CODE:

#program to print half pyramid pattern

for i in range(0,5):

print()

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

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

OUTPUT:

\*

\* \*

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4. CONVERT DECIMAL TO BINARY NUMBER

CODE:

#program to convert decimal to binary

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

a=[]

while(n>0):

d=n%2

a.append(d)

n=n//2

a.reverse()

print("Binary Equivalent is: ")

for i in a:

print(i,end=" ")

OUTPUT:

Enter a number: 15

Binary Equivalent is:

1 1 1 1