1. Write a Program to print series 0 2 6 12 20 30 42 ...N.

#include<stdio.h>

int main()

{

intn,i;

printf("enter the range of number(limit):");

scanf(%d",&n);

for(i=1,i<=n,i++)

{

print(%d",(i\*i)-I)`

}

{

2.Write a Program to print series 0,2,8,14,24,34 ...N.

#include<stdio.h>

#include<math.h>

Int main()

{

Pr=0;

If(i%2==0)

{

Pr=pow(I,2)-2

Print(“%d”,pr);  
}

II. Number Patterns :

1. Python program to print the following simple number pattern using a for loop.

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

For I range(1,0)

Print()

For I in range(I,i+1)

Print(j,end=””)

Output:

1

22

333

4444

55555

III. Pyramid Patterns

1. Simple half pyramid pattern: –

\*

\* \*

\* \* \*

\* \* \* \*

\* \* \* \* \*

For I in range(1,6)

Print()

For j in range(i)

Print(\*,end=””)

Output:

\*

\*\*

\*\*\*

\*\*\*\*

\*\*\*\*\*