III. Pyramid Pattern - Downward full Pyramid Pattern of star  
Let’s see how to print reversed pyramid pattern in Python.  
Pattern: –  
 \* \* \* \* \* \*   
 \* \* \* \* \*   
 \* \* \* \*   
 \* \* \*   
 \* \*  
 \*

Program:  
num=int(input("enter the number of rows:"))

for i in range(num,0,-1):

for j in range(0,i):

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

print()

output:

enter the number of rows:6

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

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

I. Number series  
Write a Program to Find the sum of series 2+4+6+8.....+N.

Program:

n=int(input("enter the value of n:"))

sum=0

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

sum=sum+i

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

output:

enter the value of n:18

the sum of the series is : 2

the sum of the series is : 6

the sum of the series is : 12

the sum of the series is : 20

the sum of the series is : 30

the sum of the series is : 42

the sum of the series is : 56

the sum of the series is : 72

the sum of the series is : 90

Write a Program to Find the sum of series 1+11+111+1111.....+N.

Program:  
n=int(input("enter the value of N:"))

sum=0

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

sum=sum+i\*(10\*\*(i-1))

print(sum)

output:

enter the value of N:11

120987654321

IV. Check the given number is Armstrong number

Program:  
n=int(input("enter a number:"))

sum=0

temp=n

while temp>0:

d=temp%10

sum+=d\*\*3

temp//=10

if(n==sum):

print(n,"is an armstrong number")

else:

print(n,"is not an armstrong number")

output:

enter a number:153

153 is an armstrong number

II. Number Patterns - Inverted pyramid pattern of numbers

rows=5

b=0

for i in range(rows,0,-1):

b+=1

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

print(b,end=" ")

print("\r")

output

1 1 1 1 1

2 2 2 2

3 3 3

4 4

5