1.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:2
The sum of the series is 2
```

2.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
```

3.INVERTED PYRAMID PATTERN OF NUMBERS

PROGRAM:

```
n=6
for i in range (n,0,-1):
   for j in range(1,i):
      print(j,end="")
   print("\r")
```

OUTPUT:

```
1 1 1 1 1
2 2 2 2
3 3 3
4 4
5
```

4.DOWNWARD FULL PYRAMID PATTERN OF STAR

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
* * * * * *
* * * * *
* * * *
* * *
* *
*
```

5.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: 5
5 is not an Armstrong number
```