

```
1 # create a recursive function power that receives  
  two arguments as number and power and return the  
  resultant power of  
2 # given number and power  
3  
4  
5 def power(x, y):  
6     if y == 0:  
7         return 1  
8  
9     else:  
10        return x * power(x, y - 1)  
11  
12  
13 print(power(2, 4))  
14
```

```
1 # WAF to print a Tribonacci series for the given
  step size
2
3 def trib(x):
4     if x == 0 or x == 1 or x == 2:
5         return 0
6
7     elif x == 3:
8         return 1
9
10    else:
11        return trib(x - 1) + trib(x - 2) + trib(x
    - 3)
12
13
14 n = int(input('Enter a Number: '))
15 print('Tribonacci series: ', end=' ')
16
17 for i in range(1, n):
18     print(trib(i), end=', ')
19
```

```
1 """WAF to check for Armstrong Numbers An  
2 Armstrong number of three digits is an integer  
3 such that the sum of the  
4 cubes of its digits is equal to the number itself  
5 . For example, 371 is an Armstrong number since 3  
6 **3 + 7**3 + 1**3 =  
7 371 """  
8  
9 def armstr(x):  
10     power = len(str(x))  
11     sigma = 0  
12     for i in str(x):  
13         sigma += int(i) ** power  
14  
15     if sigma == x:  
16         print('Armstrong Number')  
17     else:  
18         print('Not Armstrong')  
19  
20 num = int(input('Enter a Number: '))  
21 armstr(num)
```

```
1 """WAF to check for Automorphic numbers
2 An automorphic number is a natural number in a
3 given number base b whose
4 square "ends" in the same digits as the number
5 itself """
6
7 def automorph(x):
8     square = str(x ** 2)
9     slicing_index = -(len(str(x)))
10
11     if str(x) == square[slicing_index::]:
12         print('Automorphic Number')
13
14     else:
15         print('Not Automorphic')
16
17 num = int(input('Enter a Number: '))
18 automorph(num)
```

```
1 # WAF to reverse a string
2
3 def rev(x):
4     ind = len(x)-1
5     print(x[ind], end='')
6     if ind > 0:
7         return rev(x[:ind])
8
9     else:
10        return ''
11
12
13 name = input('Enter Name: ')
14 rev(name)
15
```