

```
In [1]: def add(a,b):  
        c=a+b  
        return(c)  
        add(12,2)
```

Out[1]: 14

```
In [12]: # pattern using function  
  
def star(a):  
    for i in range(0,a):  
        for j in range(0,i+1):  
            print("* ",end=" ")  
            print("\r")  
  
star(3)
```

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

```
In [13]: # Multiplication of three values  
  
def mult(a,b,c):  
    d=a*b*c  
    return(d)  
    mult(2,3,4)
```

Out[13]: 24

```
In [20]: # power raised to 3  
def power(a):  
    b=a*a*a  
    return(b)  
    power(3)
```

Out[20]: 27

```
In [21]: # n raised to 4  
  
def power(a):  
    b=a*a*a*a  
    return(b)  
    power(3)
```

Out[21]: 81

```
In [26]: def power(a):  
        if a!=a:  
            b=a*a  
            return(b)  
        power(3)
```

```
In [3]: # variance of 5 values

import statistics as s
a=[]
for i in range(10,15):
    a.append(i)
var=(s.variance(a))
print("The variance of above the numbers are :",var)
```

The variance of above the numbers are : 2.5

```
In [5]: # variance of given numbers

import statistics as s
a=[1,2455,65,45,12,5]
print(s.variance(a))
```

984292.7

```
In [8]: # factorial

def fact(n):
    if n==0 | n==1:
        return 1
    else:
        return(n* fact(n-1))
    print(fact(n))
fact(3)
```

Out[8]: 6

```
In [19]: # addition of even number

def even_add(number):
    a=0
    for i in number:
        if i % 2 ==0:
            a=a+i
    return a
number=[1,2,3,4,5,6,7,8,9,1,2,3,4,5,6]
even_add(number)
```

Out[19]: 32

```
In [20]: #print name

def name():
    for i in range(1,36):
        print(i,"Sumit")
name()
```

```
1 Sumit
2 Sumit
3 Sumit
4 Sumit
5 Sumit
6 Sumit
7 Sumit
8 Sumit
9 Sumit
10 Sumit
11 Sumit
12 Sumit
13 Sumit
14 Sumit
15 Sumit
16 Sumit
17 Sumit
18 Sumit
19 Sumit
20 Sumit
21 Sumit
22 Sumit
23 Sumit
24 Sumit
25 Sumit
26 Sumit
27 Sumit
28 Sumit
29 Sumit
30 Sumit
31 Sumit
32 Sumit
33 Sumit
34 Sumit
35 Sumit
```

In [21]: *#list of specific range*

```
def create_list(a,b):
    i=1
    c=[]
    for i in range(a,b):
        c.append(i)
        i=i+1
    print(c)
create_list(20,56)
```

```
[20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40,
41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55]
```

In []: