

```
In [1]: def addNumber(a,b):  
        return a+b  
        sum = addNumber(10,20)
```

```
In [2]: print(sum)
```

30

```
In [3]: # here a,b are parameters and 10,20 are arguments
```

```
In [4]: def returningMultipleValues():  
        return 10,20,30  
  
        output = returningMultipleValues()  
        print(output)
```

(10, 20, 30)

```
In [5]: def addNumbers():  
        a = 10  
        b = 20  
        return (a+b)  
  
        sum = addNumbers()
```

```
In [6]: print(sum)
```

30

```
In [8]: def add():  
        try:  
            a = int(input())  
        except ValueError as err:  
            print(err)  
        try:  
            b = int(input())  
        except ValueError as err:  
            print(err)  
        print(a+b)  
        add()
```

6  
4  
10

## Fibonacci Series

```
In [15]: def fibo(n):
    if(n<=0):
        print("Invalid Arguments")
        return -1
    if(n==1):
        print("0")
        return 1
    if(n==2):
        print(0, " ",1)
        return -1
    f1 = 0
    f2 = 1
    f3 = f1+f2
    print(f1)
    print(f2)
    count = 3
    while(count<=n):
        print(f3)
        f1 = f2
        f2 = f3
        f3 = f1+f2
        count += 1

n = int(input("Enter n value: "))
fibo(n)
```

Enter n value: 10

0  
1  
1  
2  
3  
5  
8  
13  
21  
34

## LCM and HCF

```

In [27]: a = int(input("Enter number1: "))
b = int(input("Enter number2: "))
def lcm(a,b):
    val = a if a>b else b
    while True:
        if val%a==0 and val%b==0:
            lcm = val;
            break
        val += 1
    return val

def hcf(a,b):
    hcf = 1
    val = a if a<b else b
    for i in range(1,val+1):
        if(a%i==0 and b%i==0):
            hcf = i
    print(hcf)

hcf(a,b)
lcm(a,b)

```

```

Enter number1: 4
Enter number2: 8
4

```

Out[27]: 8

```

In [24]: def doJob(n):
        if(n<=2):
            return
        print(n)
        doJob(n-1)
        print(n)
doJob(10)

```

```

10
9
8
7
6
5
4
3
3
4
5
6
7
8
9
10

```

```
In [25]: def job(n):  
        if(n<=5):  
            return  
        job(n-1)  
        print(n)  
        job(n-1)  
        print(n)  
job(8)
```

```
6  
6  
7  
6  
6  
7  
8  
6  
6  
6  
7  
6  
6  
7  
8
```

## Towers of Hanoi

```
In [ ]:
```