

# Functions

In [1]:

```
def greet():  
    print("Hello")  
    print("Good Morning")
```

greet()

Hello  
Good Morning

In [2]:

```
def sub_add(x,y):  
    c=x+y  
    d=x-y  
    return c,d
```

```
result1,result2 = sub_add(5,4)  
print(result1, result2)
```

9 1

In [3]:

```
var = 100  
def my_func():  
    var = 10  
    print("Local Value inside function:",var)  
print("Globle Value outside function:",var)  
my_func()
```

Globle Value outside function: 100  
Local Value inside function: 10

Q-> Factorial using recursion

In [4]:

```
def calc_factorial(x):  
    if x == 1:  
        return 1  
    else:  
        return (x * calc_factorial(x-1))
```

```
num = 4  
ans = calc_factorial(num)  
print("The factorial of", num,"is",ans)
```

The factorial of 4 is 24

In [5]:

```
# Python default argument  
def greet(name, msg="Good morning"):  
    print("Hello",name + ', ' + msg)
```

```
greet("Rama")  
greet("Rama","How do you do?")
```

Hello Rama,Good morning  
Hello Rama,How do you do?

Hello Rama,How do you do?

In [6]:

```
# Python Keyword argument

# 2 keyword arguments
greet(name = "Sita", msg = "How do you do?")

# 2 keyword arguments (out of order)
greet(msg = "How do you do?",name = "Laxman")

# 1 positional, 1 keyword argument
greet("Rama",msg = "How do you do?")
```

Hello Sita,How do you do?  
Hello Laxman,How do you do?  
Hello Rama,How do you do?

In [7]:

```
#Python Arbitrary Arguments
def greet(*names):
    # names is a tuple with arguments
    for n in names:
        print("Hello",n)

greet("A1","A2","A3","A4")
```

Hello A1  
Hello A2  
Hello A3  
Hello A4

In [ ]: