Function Arguments:

```
def greet(name, msg):
    """
    This function greets to a person with provided message
    """
    print("hello {0} {1}".format(name, msg))

# call function with arguments
h ="Harsh raj singh"
g = "Good morning"
greet(h,g)
```

```
hello Harsh raj singh Good morning
```

```
# suppose if we pass one agrument
greet("harsh raj singh") # will get an error
```

```
---------------------------------------------------------------------------
-----
TypeError                                 Traceback (most recent call
last)
<ipython-input-2-950026f14de7> in <module>
      1 # suppose if we pass one agrument
----> 2 greet("harsh raj singh") # will get an error

TypeError: greet() missing 1 required positional argument: 'msg'
```

Different Forms of Arguments

1. Default Argument:

We can provide default value to an argument by using the assignment operator "=".

```
def greet(name, msg = "Good morning"):
    """
    This function greets to a person with provided message
    if massage is not provided, it defaults to Good marning
    """
    print("hello {0} {1}".format(name, msg))

# call function with arguments
greet("Mr.harsh Raj", "Good Night")
```

```
hello Mr.harsh Raj Good Night
```

```
# with out msg argument
greet("Mr. harsh Raj singh")
```

```
hello Mr. harsh Raj singh Good morning
```

Once we have a default argument, all the arguments to its right must also have default values.

def greet(msg="Goodmrng", name)

#we get a syntax error: non default argument follows default argument.

```
def greet(msg = "Good morning", name = " Harsh"):
    """
    This function greets to a person with provided message
    if massage is not provided, it defaults to Good marning
    """
    print("hello {0} {1}".format(msg, name))

# call function with arguments
greet("Mr. Singh")
```

```
hello Mr. Singh  Harsh
```

2. Keyword Arguments:

kwargs allow to you to pass keyworded variable lenght of arguments to function. You should use **kwargs if you want to handle named arguments in a function.

Example:

```
def greet(**kwargs):
    """
    This function greets to person with provided message
    """
    if kwargs:
        print("Hello {0} {1}".format(kwargs['name'],kwargs['msg1']))

greet(name='Mr. sharma',msg1 = 'Good Morning', msg2 = "Nice to meet
you" )
```

```
Hello Mr. sharma Good Morning
```

3. Arbitary Arguments:

Sometime, we do not know in advance the number of arguments that will be passed into a function. Python allow us to handle this kind of situation through function calls with arbitary number of arguments.

```python
def greet(*names):
    """
    This function greets all person in the name tuple
    """
    print(names)
    for name in names:
        print("Hello, {0}".format(name))

greet('satish','Harsh','Raj','Shivam','Prasant','Dk', 'ashish')    #
this is arbitary lenght of varibles and pass to function as tuple
```

```
('satish', 'Harsh', 'Raj', 'Shivam', 'Prasant', 'Dk', 'ashish')
Hello, satish
Hello, Harsh
Hello, Raj
Hello, Shivam
Hello, Prasant
Hello, Dk
Hello, ashish
```