

Function **A Function is a Self Contained Block of code which is used to perform Particular Task**

Block of Code

```
a=10  
b=20  
print(a+b)
```

Add()

```
a=10  
b=20  
print(a+b)
```

def aa(x,y): **Formal**

print(a+b)

print(a-b)

print(a*b)

a=int(input())#10

b=int(input())#20

aa(a,b) **Actual**

Input

10

20

Output

30

-10

200

Arrgument Group of Parameters

○ **Parameters**

```
def sum(a, b):
```

```
    print("Hai")  
    print("Hello")
```

```
sum(10, 20)
```

Arrgument

Creation of Function

We create a Function by using **def** Keyword

def = Definition

Block Diagram

Declaration

Definition

Call

Syntax

def Fun-Name(PL) :

#Stmt-Block

Fun-Name(PL)

Example

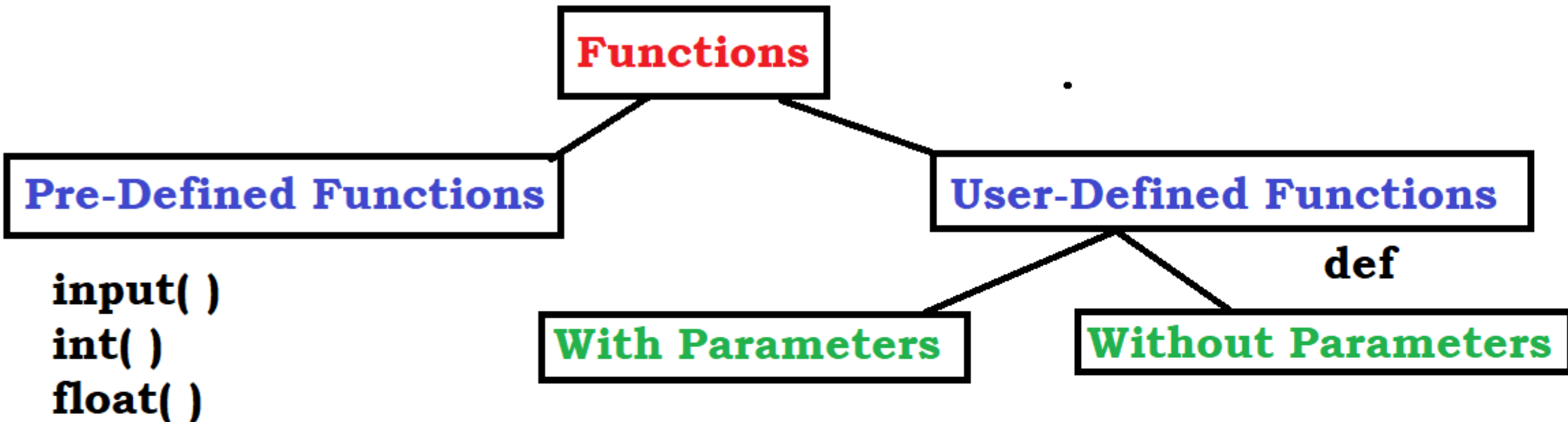
def MyBlock():

print("Hello")

MyBlock()

Types of Functions

Bascially we have two Types of Functions

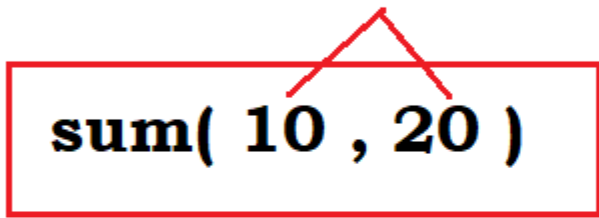


Fncion with Parameter

Parameter - A Parameter is a Values which are Pass to Function for perform a Specific Task.

Parameters

sum(10 , 20)

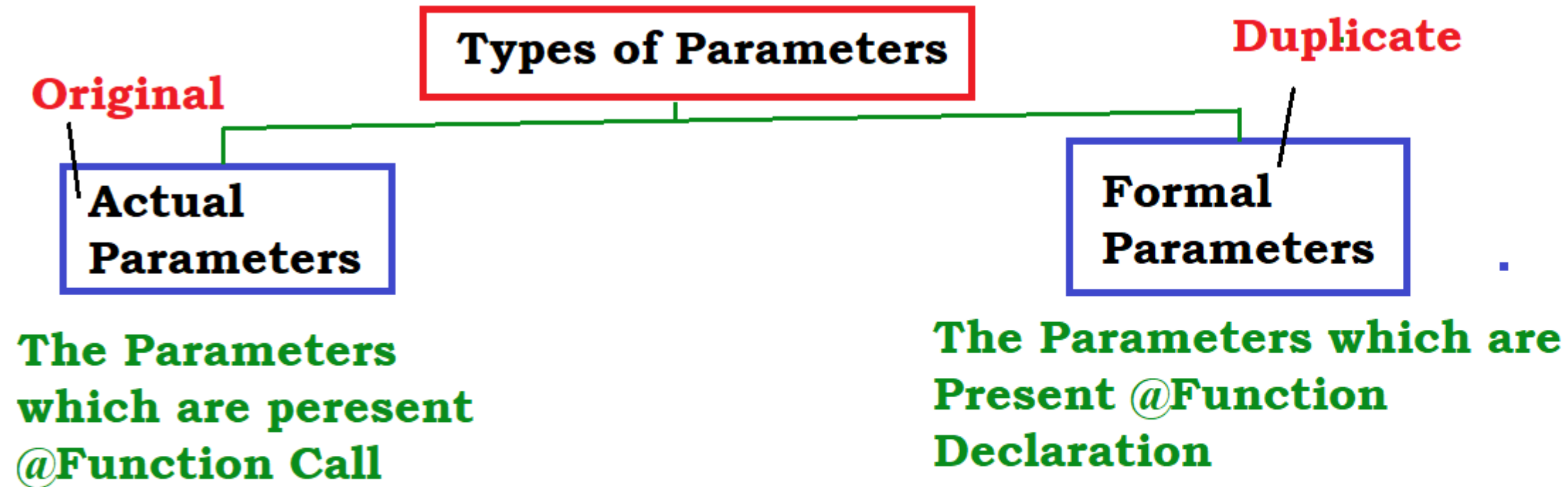


10 , 20



Values

Types of Parameters



Lambda

Use **lambda** Keyword

A Lambda is a **Small Anonymous Function**

The Lambda can take any Number of Arrgumants but it
Evaluates in a **Single Expression**

Syntax

lambda Arrguments : Expression

```
z=lambda a,b : a-b+a  
print(z(10,20))#0
```

```
z=lambda a,b : a+b+a  
print(z("C","S"))#CSC
```

```
z=lambda a,b,c : a-b+a  
print(z(10,20))
```

```
TypeError: <lambda>()  
missing 1 required  
positional argument: 'c'
```