

# Functions in Python

## Python Functions

A function is a block of code that perform a specific task whenever it is called. In a bigger programs. Where we have large amounts of code, it is advisable to create or use exiting functions that make the program flow organized and neat.

There are two types of functions:

1. Built in functions
2. User defined functions:

### Built in functions:

These functions are defined and pre-codded in python. Some examples of built in functions.

Min(), max(), len(), range(), dict(), list(), tuple(), set(), print() etc.

### User defined functions:

We can create functions to perform specific task as per our needs. Such functions are called user defined functions.

Syntax

```
def function_name():  
    pass  
    #case statement
```

- Create a function using the def keyword followed by a function name, followed by a parenthesis (()) and a colon (;).
- Any parameters and arguments should be placed within the parentheses.

- Rules to naming function are similar to that of naming variables
- Any statements and the other code within the function should be indented.

## Calling a function:

We call a function by giving the function name, followed by parameters(if any ) in the parentheses.

Example:

```
def name(fname,lname):  
    print("Hello,",fname,lname)  
name("Munawar","Hussain")
```

## Source Code

```
def calcuteGmean(a,b):  
    mean=(a*b)/(a+b)  
    print(mean)  
def isgreater(a,b):  
    if(a>b):  
        print("First number is greater")  
    else:  
        print("Second number is greater or equal")  
  
a=9  
b=8  
  
# gmean=(a*b)/(a+b)  
# print(gmean)  
isgreater(a,b)  
calcuteGmean(a,b)  
  
c=8  
d=7  
isgreater(c,d)  
# gmean2=(c*d)/(c+d)  
# print(gmean)
```

```
calcuteGmean(c,d)
```

```
def name(fname,lname):  
    print("Hello,",fname,lname)  
name("Munawar","Hussain")
```

Thank You