



# Python Programming

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Session 9

# TOPICS

## Python Fundamentals and Programming

### ❖ Functions

## Function

Sometimes we want to do a job, a calculation, or anything, in more than one place of our code, in these time to get rid of repeating a job that has a same code in different places, we use function.

Functions help us from repeating a part of code and make our program more readable, and easier to debug.



## Function

So, a function is a block of code which only runs when it is called. Also we can pass data, known as parameters, into a function and a function can also return data as a result to the program and that line we have call it too.



## Creating a function

*def* is function keyword, you can use this keyword to create a function.

Syntax: *def* function\_name():

```
def my_function():  
    print("Hello from a function")  
  
my_function()
```

## Number of arguments

By default a function must be called with the correct number of arguments. Meaning that if your function expects 2 arguments, you have to call the function with 2 arguments, not more, not less.



## Exercise #1

Research about `*args` in function arguments?

Research about default parameters value for the function.



## Return values

A function can returns its result too

```
def my_function(x):  
    return 5 * x  
  
print(my_function(3))  
print(my_function(5))  
print(my_function(9))
```



## Exercise #2

Research about `lambda()` method in python

