

Functions And Docstrings | Python Tutorials For ...

Show Course Contents (+)

Overview Q&A Downloads Announcements

Functions And Docstrings

“Functions in Python can be defined as lines of codes that are built to create a specific task and can be used again and again in a program when called.”

There are two types of functions in the Python language:

- Built-in functions
- User-defined functions

We have used a lot of built-in functions in our code till now, these functions include `print()`, or `sum()`, etc. So, we have a good idea about how to call a function. Built-in functions are already present in our python program, and we just have to call them whenever we need them to execute. Being familiar with built-in functions we will now look into User-defined function mostly in this tutorial

Ads by Google

Stop seeing this ad

Why this ad? ⓘ

arguments or parameters to a function. In simple words, parameters can be defined as values that are sent in the parenthesis. For example, if a function is used to add two numbers then both the numbers will be passed as parameters in the



Calling a function is very simple, we just have to write the name of the function along with the closing parenthesis. If the function requires some arguments then we write those in the parenthesis, but if it does not return anything, then we leave them empty. We have discussed a lot about what functions are and how to use them, now let us move to the advantages of using a function:

- If we are working on a big project then we will prefer to make as many functions as possible, so every other member of our team could use that.
- By using functions, we can avoid the repetition of code to an extent. As we have discussed in the previous tutorial i.e. Tutorial #22, more lines of code mean less efficiency. Also repeating the same code at different places will just make the code more crowded than required.
- The reusability of code is ensured by using functions. We can even use a function inside another function or in any part of our code.
- By making a function of code that we are going to use again and again, we can save a lot of time.

Docstrings

Docstring is a short form of documentation string. Its purpose is to give the programmer a brief knowledge about the functionality of the function. It must be the first string in a function, and it is also an optional string but always good to have it while working on programs having multiple functions. The syntax for writing a docstring is very simple as it is just a string written in between three double quotes placed three times (""" """) on either side of the string. But it has to be the first line of code in the function's body. To call a docstring we write the name of the function

```
# a = 9
# b = 8
# c = sum((a, b)) # built in function

def function1(a, b):
    print("Hello you are in function 1", a+b)

def function2(a, b):
    """This is a function which will calculate average of two numbers
    this function doesnt work for three numbers"""
    average = (a+b)/2
    # print(average)
    return average

# v = function2(5, 7)
# print(v)
print(function2.__doc__)
```

[Previous](#)[Next](#)**CodeWithHarry**

Copyright © 2022 CodeWithHarry.com

