Lesson 2 - Functions and Modules

March 13, 2018

1 Lesson 2: Functions and Modules

1.0.1 Functions

1. Block of organized, reusable code that is used to perform a single, related action
2. Provide better modularity for your application and a high degree of code reusing
3. Python gives you many built-in functions like print(), len() etc..
4. It is also possible to define user-defined functions

Wite a small function that checks if the number entered by the user is 5

```
In [2]: # FUNCTION DEFINITION
        def check_if_5(user_number):
            """This function just checks if the number passed to it is equal
            to 5. It returns 1 if the number is 5 and returns 0 if the number is not 5 """
            if user_number == 5:
                return 1
            else:
                return 0

        #FUNCTION CALL
        return_val = check_if_5(5)

        if return_val == 1:
            print("It is 5")
        else:
            print("It is not 5")
```

```
It is 5
```

1.0.2 Modules

1. A set of related functions can be grouped together as module
2. A module is nothing but a python file
3. The open source community continuosly builds modules and makes it available for us
4. To access these modules we need to use the "import command"

Let us import a commonly used module and access one of its functions.

```
In [9]: import random
        print('A random number between 1 and 6 is: ',random.randint(1,6))
```

```
A random number between 1 and 6 is:  3
```

It is also possible to import specific functions from within the module directly. When you do this make sure you have not used the same name for your function.

```
In [11]: from random import randint
         print('A random number between 1 and 6 is: ',randint(1,6))
```

```
A random number between 1 and 6 is:  6
```