

# ASSIGNMENT 3

## 1. Why are functions advantageous to have in your programs?

By using the functions, we can reuse the code snippets multiple times by calling them. It would reduce the program length and we can make the updates easily.

## 2. When does the code in a function run: when it's specified or when it's called?

The function would get executed when it is called but not when it is defined.

## 3. What statement creates a function?

def is the keyword used to create a function

## 4. What is the difference between a function and a function call?

The function begins with the keyword 'def' and there would be a code in this block whereas the function call is the code block which moves the control to the function definition and returns the value.

## 5. How many global scopes are there in a Python program? How many local scopes?

There would be only one global scope and local scope is created when a function is called. There can be n number of local scopes.

## 6. What happens to variables in a local scope when the function call returns?

The local scope is destroyed and all the variables would be erased.

## 7. What is the concept of a return value? Is it possible to have a return value in an expression?

The return value is generated when a function is called. Yes, it is possible to have a return value in an expression.

## 8. If a function does not have a return statement, what is the return value of a call to that function?

It would return 'None' if there is no return statement in a function.

## 9. How do you make a function variable refer to the global variable?

We can use the 'global' keyword to declare the variables as global. It would force a variable in function irrespective of same name of the variable with in the function.

## 10. What is the data type of None?

The datatype of None is NoneType.

**11. What does the sentence `import sys` do?**

The import statement would import a module. Ex: `import pandas`, `import numpy`.

**12. If you had a `bacon()` feature in a `spam` module, what would you call it after importing `spam`?**

`Spam.bacon()`

**13. What can you do to save a programme from crashing if it encounters an error?**

We need to place the code in try block to prevent crashing.

**14. What is the purpose of the try clause? What is the purpose of the except clause?**

To find out an error we can use 'try' block and the code that needs to be executed if an error is occurred will be in 'except' block.