# Assignment 3

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

**Answer:**

Functions reduce the need for duplicate code. This makes programs shorter, easier to read, and easier to update. The main advantage of functions is code Reusability.

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

**Answer:**

The code in a function executes when the function is called, not when the function is specified.

#### 3. What statement creates a function?

**Answer:**

The def statement defines a function  
Syntax of Function:  
def function\_name(parameters):

"""doc string"""

-----function body-----

-----function body-----

return value

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

**Answer:**

A function is procedure to achieve a particular result. while function call is using this function to achive that task. Using a function to do a particular task any point in program is called as function call.

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

**Answer:**

There is one global scope, and a local scope is created whenever a function is called.

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

**Answer:**

When a function returns, the local scope is destroyed, and all the variables in it are forgotten.

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

**Answer:**

A return value is the value that a function call evaluates to. Like any value, a return value can be used as part of an expression.

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

**Answer:**

If there is no return statement for a function, its return value is None.

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

**Answer:**

A global statement will force a variable in a function to refer to the global variable. If you want to refer to a global variable in a function, you can use the global keyword to declare which variables are global.

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

**Answer:**

The data type of None is NoneType.

#### 11. What does the sentence import areallyourpetsnamederic do?

**Answer:**

That import statement imports a module named areallyourpetsnamederic.

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

**Answer:** This function can be called with spam.bacon().

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

**Answer:**

Place the line of code that might cause an error in a try clause and use except block to handle the error.

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

**Answer:**

The code that could potentially cause an error goes in the try clause. The code that executes if an error happens goes in the except clause.