

# Assignment 3

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

**Ans:** 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?

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

## 3. What statement creates a function?

**Ans:** 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?

**Ans:** A function is procedure to achieve a particular result. while function call is using this function to achieve 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?

**Ans:** 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?

**Ans:** 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?

**Ans:** 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?

**Ans:** 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?

**Ans:** 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?

**Ans:** The data type of None is None Type.

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

**Ans:** 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`?

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

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

**Ans:** 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?**

**Ans:** 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.