# **Assignment 3 Solutions**

#### **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 a 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 at any point in the program is called a 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 NoneType.

#### **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.