

### **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.

#### **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 defined.

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

**Ans-** The def statement defines, i.e., creates a function.

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

**Ans-** A function consists of the def statement and the code in its def clause. A function call is what moves the program execution into the function, and the function call evaluates to the function's return value..

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

**Ans-** There is one global scope, and the local scope or function scope is a Python scope created at function calls. Every time you call a function, you're also creating a new local scope.

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

**Ans-** Then the execution of the function terminates (returns), the local variables are destroyed.

#### **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 no return statement appears in 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.

#### **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-** This 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.

**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.