Assignment - 3

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

Solution:

**Functions reduce the need for more number of lines of code. This makes programs shorter, easier to read and understand, and easier to update. Breaks an extensive program into smaller and simpler pieces .**

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

Solution**:**

**The code in a function runs when the function is called, not when the function is defined.**

3. What statement creates a function?

Solution:

**We create or define a function with the def keyword, then we need to mention the function identifier (name) followed by parentheses and a colon**.

**Example: def spam ():**

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

Solution**:**

**A function is a piece of code or block of code are intended with the function, which enhanced the reusability and modularity of your program. It means that piece of code need not be written again.**

**A function call means invoking or calling that function. Unless a function is called there is no use of that function.**

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

Solution:

**Global scope: There's only one global Python scope per program execution. This scope remains in existence until the program terminates and all its names are forgotten. Otherwise, the next time you were to run the program.**

**Local scope is a characteristic of variables that makes them local (i.e., the variable name is only bound to its value within a scope which is not the global scope).**

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

Solution:

**When the execution of the function terminates (returns), the local variables are destroyed. it gets deleted from the memory after function call returns.**

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

Solution**:**

**A return is a value that a function returns value to a variable where the function is called from, when it completes its task. A return value can be any one of the four variable types: handle , integer, object, or string.**

**A value-returning function should include a return statement, containing an expression.**

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

Solution:

**If an expression is not given on a return statement in a function declared with a non- void return type, the compiler issues a warning message.**

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

Solution:

**If the variable is declared outside the function is known as global variable**.**To create a global variable inside a function, we can use the global keyword.**

**global (name)**

10. What is the data type of None?

Solution**:**

**The None keyword is used to define a null value, or no value at all. None is not the same as 0, False, or an empty string. None is a data type of its own (None Type) and only None can be None.**

11. What does the sentence import areallyourpetsnamederic do?

Solution:

**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?

Solution:

**import spam**

**B =spam.bacon()**

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

Solution**:**

**Error handling can be used to notify the user of why the error occurred and gracefully exit the process that caused the error.** **And click key ctrl+c to escape from infinite execution.**

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

Solution:

**The try block lets us test a block of code for errors. The except block lets us handle the error. The finally block lets us execute code, regardless of the result of the try- and except blocks.**