**PYTHON BASIC ASSIGNMENT – Assignment\_3**

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

* Reducing duplication of code.
* Decomposing complex problems into simpler pieces.
* Improving clarity of the code.
* Reuse of code.

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

The code in a function runs when the function is called.

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

‘def’ keyword followed with function name , parenthesis and colon creates a function.

Ex;

**def example():**

**pass**

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

A function is a block of code that only runs when it is called whereas a function call is calling the present function with appropriate parameters to obtain a result.

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

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.

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?**

When the function returns, the local scope is destroyed and the variable names are forgotten.

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

A return statement is used to end the execution of the function call and “returns” the result (value of the expression following the return keyword) to the caller. The statements after the return statements are not executed. If the return statement is without any expression, then the special value None is returned.

The user can only use the return statement in a function.

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

If there is no return statement in the function code, the function ends, when the control flow reaches the end of the function body and the value None will be returned.

**9. How do you make a function variable 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?**

NoneType

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

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?**

bacon()

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

We can use try and except clause to save a programme from crashing if werror is encountered.

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

The try clause lets you test a block of code for errors and the except clause lets you handle the error.