**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 run when the function is called, not when the function is defined.

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

*Ans:*

The “def” keyword is a statement that creates a function.

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

*Ans:*

* A function is a block of code that does a particular operation and returns a result. It usually accepts inputs as parameters and returns a result. The parameters are not mandatory.  
  Example:  
  Function

add(a,b)  
return a+ b

* A function call is the code used to pass control to a function.  
  Example:  
  b = add(5,6)  
    
  Now b will have the value 11.

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

*Ans:*

* There is one global scope.
* Local scope is created when the function is called.

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

*Ans:*

When the function call, the variables in local scope are destroyed.

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

*Ans:*

* A function takes arguments, performs some operations, and returns a value. The value that a function returns to the caller is known as the function's return value. All Python functions have a return value.
* Yes, 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 a function does not have a return statement, the default return value will always be None.

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

*Ans:*

While creating a variable inside a function, that variable will be local, and can only be used inside that function. To create a global variable inside a function, we can use the **global** keyword.

**10. What is the data type of None?**

*Ans:*

The data type of None is NoneType. None is a data type of its own.

**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.

**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.