**Assignment 3 Solution**

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

**Answer :-**

**Function reduce the need of duplicate code, because of this program is shorter and easy to understand, easy to read and easy to update.**

**This is the main advantage of creating function in own program.**

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

**Answer :-**

**Function is nothing but the piece of code, function do particular operation and return a result.**

**Function is a piece of code which run when it is referenced.**

**First we declared the function then we call that function to perform some sort of operation.**

**For example:-**

**def sum(a,b):**

**return a+b**

**Here we defined the function called sum using the def keyword and pass two parameter that is a and b and this function return the sum of a and b when we call it.**

**For calling function we have to used function name and pass parameter.**

Q.3 => What statement creates a function?

**Answer :-**

**When we want to create function we need to used def keyword and name of function.**

**For example:-**

**def sum() => This statement create a function that is sum.**

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

**Answer :-**

**A function is a piece of code that does particular operation and return a result.**

**For Example:-**

**def add(a,b):**

**return a+b**

**A function call is the code used to pass the control to the function.**

**For example:-**

**b = add(4,5)**

**Now b store the sum of 4 and 5 that is 9.**

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

**Answer :-**

**There are only one global as well as local space per python program execution.**

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

**Answer :-**

**When the execution of function return then local variables are destroyed**.

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

**Answer :-**

**A return statement is used to end the execution of function call and return the result to the function caller.**

**Yes it is possible to have a return value in an expression.**

**You can use any object as a return.**

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

**Answer :-**

**If function does not have a return statement then function call return special type none.**

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

**Answer :-**

**If we want to refer function variable to the global variable then we need to used global keyword to declared which variables are global variable.**

Q.10 => What is the data type of None?

**Answer :-**

**None is a data type of its own (None type).**

Q.11 => What does the sentence import areallyourpetsnamederic do?

**Answer :-**

**That import sentence import the module name areallyourpetsnamederic**.

Q.12 => If you had a bacon() feature in a spam module, what would you call it after importing spam?

**Answer :-**

**spam.bacon()**

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

**Answer :-**

**When it encounters an error the control is passed to the except block and skip the code in between.**

Q.14 => What is the purpose of the try clause? What is the purpose of the except clause?

**Answer :-**

**It is used to test the code for error which is written in try block.**

**If error is encountered then the concept of except block run or we need to handle those error in except block.**