**Assignment-3**

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

Solution: Functions are advantageous in programs because they avoid duplication of codes enabling the reusability of the codes, simplify the code and improve clarity of the code.

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

Solution: Function runs in a code when done the both i.e., first we have to specify the function and then we have to call it by passing values if needed.

1. What statement creates a function?

Solution: A function can be created by calling a keyword ‘def’ which means define.

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

Solution: The difference between a function and function call is, function is the procedure to achieve a particular result and function call is using the function to achieve the tast anywhere.

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

Solution: There is only one global variable exist per python program. There are four local variables in a local scope, they are local, enclosing, global and built-in.

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

Solution: The variable in local scope retains its value until the function call completes. The local variable can be used anywhere in the program afterwards, i.e., on the completion of the function call.

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

Solution: the value that the function returns to the caller after performing the task is called the return value. A return statement is used to end the execution of a function call returns the result to the caller. A return cannot be used outside a function call.

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

Solution: If a function doesn’t have a return statement in the function, then the function returns the value on its own after the execution of the last statement. In this case the return value is undefined.

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

Solution: We can use the keyword ‘global’ to refer to the intended variable to make it global.

1. What is the data type of None?

Solution: None is a data type on its own, and its value is None.

1. What does the sentence import areallyourpetsnamederic do?

Solution: That import statement imports a module named areallyourpetsnamederic.

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

Solution: This function can be called with spam.bacon().

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

Solution: We can place the line of code in ‘try’ clause to save it from crashing on encountering error.

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

Solution: The code that could potentially cause an error in the program goes into the ‘try’ clause. The code that executes if an error happens goes in the except clause.