Assignment-3

1. 1. Why are functions advantageous to have in your programs?
   Function avoids writing the same code again and again when it is used.

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

3. What statement creates a function?
   def function_name()

4. What is the difference between a function and a function call?
   Function: It is a block where the code is written which needs to be executed
   Function call: It is a code which passes the control to function.

5. How many global scopes are there in a Python program? How many local scopes?
   One global scope per program until program is executed and terminated
   Local scopes depends upon number of functions which is being created

6. What happens to variables in a local scope when the function call returns?
   Local variables return values and vanishes until next input is given to the function

7. What is the concept of a return value? Is it possible to have a return value in an expression?
   Return statement returns the value of function call.
   Yes we can have return value in an expression unless and until it is under same function name

8. If a function does not have a return statement, what is the return value of a call to that function?
   None

9. What is the data type of None?
   NoneType

10. What does the sentence import areallyourpetsnamederic do?
    Import the module which is in the name **areallyourpetsnamederic**

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

12. What can you do to save a programme from crashing if it encounters an error?
    Try and except block can be used to avoid program crashing and display error message

13. What is the purpose of the try clause? What is the purpose of the except clause?
    Try tries to execute the condition written it if there is no exception then output is displayed.

    Except block is used to display error message of exception

Example:

```
try:
        Mul=a*b
        Div=a/b

        return(Mul)
        return(Div)
except:
        print("Division by zero")
```

Output:

```
  a=3
  b=0

Mul=0
Division by zero
```

Multiplication is executed, exception message is shown for division.