

## Assignment\_3

Submitted by Satyam Neelmani

[satyam.neelmani@gmail.com](mailto:satyam.neelmani@gmail.com)

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

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?

Code in a function runs only when it is called.

3. What statement creates a function?

The "def" keyword is a statement for defining a function in Python. We start a function with the def keyword, specify a name followed by a colon (:) sign. The "def" call creates the function object and assigns it to the name given.

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

A Function is block of code that accepts some values, processes the desired task on it, and returns the result value, whereas a function call is using a function to do a particular task at any point in a program.

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

There's only one global and local Python scope per program execution. Global scope remains in existence until the program terminates and all its names are forgotten. Local scope variable disappears when we come out of the function where it was defined.

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

When a function call returns, then variables in the local scope are disappeared.

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

A function takes arguments (if any), performs some operations, and returns a value (or object). The value that a function returns to the caller is generally known as the function's return value. Return ends the execution of the function. Concept of return exists in function only. Like any other value, return value can be used as a 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?

If there are no return statements, then it returns None.

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

We can use the global keyword to make a function variable a global variable.

10. What is the data type of None?

<class 'NoneType'>

11. What does the sentence `import re` do?

It will import the module 're'.

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

```
import spam
foo = spam.bacon()
```

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

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?

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.