

## Assignment 3

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

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 executes when the function is called, not when the function is defined.

3. What statement creates a function?

Ans - the def statement defines, i.e. creates a function.

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

Ans - A function consists of the def statement and the code in its def clause. A function call is what moves the program execution into the function, and the function call evaluates to the function's return value.

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

Ans - There is only one global scope in python and the local scope or function scope is a Python scope created at function calls. Every time you call a function, you're also creating a new local scope.

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

Ans - When a function returns, the local scope is destroyed, and all the variables in it are forgotten.

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

Ans - A return value is the value that a function call evaluates to. Like any value, a 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 there is no return statement for a function, its return value is None.

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

Ans - A global statement will force a variable in a function to refer to the global variable.

10. What is the data type of None?

Ans - The data type of None is None Type

11. What does the sentence import are all your pets namederic 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.

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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.