Python basics assignments -3

1. Functions are advantageous to have in your programs because they allow you to define a block of code that can be executed multiple times throughout your program. This can make your code more organized and easier to read, as well as easier to debug if you need to find and fix an error. Functions also allow you to reuse code, which can save you time and effort when writing and maintaining your program.
2. The code in a function runs when the function is called.
3. The "def" statement creates a function.
4. A function is a block of code that is defined and given a name, while a function call is the act of executing that block of code.
5. There is only one global scope in a Python program, but there can be multiple local scopes, depending on the number of function definitions in the program.
6. When a function call returns, variables in the local scope are destroyed and are no longer accessible.
7. A return value is the value that is returned from a function when it is called. It is possible to have a return value in an expression, as long as the expression evaluates to a value that can be returned from the function.
8. If a function does not have a return statement, the return value of a call to that function is None.
9. To make a function variable refer to the global variable, you can use the "global" keyword inside the function.
10. The data type of None is NoneType.
11. The sentence "import areallyourpetsnamederic" would import a module or package with the name "areallyourpetsnamederic".
12. After importing the spam module, you would call the bacon() function by using the syntax "spam.bacon()".
13. To save a program from crashing if it encounters an error, you can use try-except statements to catch and handle the error gracefully.
14. The purpose of the try clause is to define a block of code that may cause an error. The purpose of the except clause is to define a block of code that will be executed if an error occurs in the try clause. The except clause can be used to handle the error and prevent the program from crashing.