1. Create an assert statement that throws an AssertionError if the variable spam is a negative integer.

assert(spam >0, 'The spam variable is negative integer.')

1. Write an assert statement that triggers an AssertionError if the variables eggs and bacon contain strings that are the same as each other, even if their cases are different (that is, 'hello' and 'hello' are considered the same, and 'goodbye' and 'GOODbye' are also considered the same).

assert(eggs.upper() != bacon.upper(), 'The eggs and bacon variables are the same!')

1. Create an assert statement that throws an AssertionError every time.

Assert(False,’trigger assertion error everytime’)

1. What are the two lines that must be present in your software in order to call logging.debug()?

import logging

logging.basicConfig(level=logging.DEBUG, format=' %(asctime)s - %(levelname)s - %(message)s')

1. What are the two lines that your program must have in order to have logging.debug() send a logging message to a file named programLog.txt?

import logging

logging.basicConfig(filename='programLog.txt', level=logging.DEBUG, format=' %(asctime)s - %(levelname)s - %(message)s')

1. What are the five levels of logging?

INFO,ERROR,DEBUG, WARNING, CRITICAL

1. What line of code would you add to your software to disable all logging messages?

Import logging

Logging.disable(logging.CRITICAL)

8.Why is using logging messages better than using print() to display the same message?

We can disable logging messages without removing the logging function calls and also we can selectively disable lower level logging messages

1. What are the differences between the Step Over, Step In, and Step Out buttons in the debugger?

Step over is used to execute the function call without stepping into it where as step out is used to step out of the function it is currently in

10.After you click Continue, when will the debugger stop ?

When it comes to the next breakpoint

11. What is the concept of a breakpoint?

Breakpoint is set in the code when we want to debug, the execution stops at that particular line of code and see what is happening exactly at that particular line like what are the inputs it got and what are the outputs we get after executing