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

spam= -1

assert spam >0

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).

eggs = 'goodbye'

bacon = 'GOODbye'

assert eggs == bacon

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

c = False

assert c

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)

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)

1. What are the five levels of logging?

DEBUG, INFO, WARNING, ERROR,CRITICAL

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

logging.disable(logging.CRITICAL)

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

Logging messages can be disabled and they can provide the timestamps

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

Step in will move the debugger into a function inner body, step over will iterate to the next function call / step, step out will execute all the steps and gets out of the function.

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

It will stop to the next breakpoint else it will execute the program till the EOL.

11. What is the concept of a breakpoint?

We can mark a particular line as a breakpoint then the when we run a program with debugger then it will execute the program till the breakpoint and stops for further steps.