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

Ans

spam = -10

assert spam < 0

print('spam is a negative number.')

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).

Ans

eggs = 'hello'

bacon = 'good bye'

assert eggs.lower == bacon.lower, 'eggs/bacon should not be the same!'

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

Ans

assert False, 'assertion error'

1. What are the two lines that must be present in your software in order to call logging.debug()?
2. 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?

Ans

import logging

logging.basicConfig(filename='programLog.txt', filemode='w', format='%(name)s - %(levelname)s - %(message)s')

logging.warning('This will get logged to a file')

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?

import logging

logging.basicConfig(filename='programLog.txt', filemode='w', format='%(name)s - %(levelname)s - %(message)s')

logging.disable

logging.warning('This will get logged to a file')

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

Because with print, when your program is ready for production, you still have to "remove" or comment it out. Verses logging message, you can toggle the setting on/off or write to a file (send to a server). It is more flexible especially with logging level 1-5.

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

Step - one line execution at a time

Over - excecute the next line of code, but if it is a program, it will

complete the entire function call.

out - execute the lines of code unti it returns from the current function.

(out is useful when you stepped into a function call).

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

runs until the program terminate or reaches a breakpoint set.

1. What is the concept of a breakpoint?

to create a breakpoint. During Go - it will stop there and await your next execution