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

assert (spam>=0 ) # gives an error for negative numbers.

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.lower()!=bacon.upper()) or assert(eggs.upper()!=bacon.upper()) ### gives the same variable of eggs and bacon.

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

assert(False) ### always triggers the errors.

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

For logging we must always import the logging module.

And must the basic configuration like level, format and filename.

Import logging as lg

Lg.basicConfig(filename=’…….’, level=’lg.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?

For logging we must always import the logging module.

And must the basic configuration like level, format and filename.

Import logging as lg

lg.basicConfig(filename=’ programLog.txt’, level=’lg.DEBUG’, format=’%(asctime)s %(levelname)s %(message)s ‘)

1. What are the five levels of logging?

The five levels of logging are DEBUG, WARNING, CRITICAL, ERROR and INFO.

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

logging.disable(logging.CRITICAL) disables the logging messages.

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

Logging gives us the log information of multiple users, with every details like time, system used, and we can control the level of messages which are to be logged.

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

The step over will execute the code without stepping into the function call.

The step in will move the debugger into the function call.

The step out will execute rest of the code until it steps out of the current function call.

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

The debugger always stop at a breakpoint if there is none it executes the whole programm.

11. What is the concept of a breakpoint?

Breakpoint is a concept of debugger where the debugger just pause the execution of code for the programmer to recheck it or find the working of the line of code.