COMP 1405B1 (Tuesday)
Introduction to Computer Science I
Midterm #2 – October 29th, 2019

Part 1 [10 marks]

Write the code for this part in the part1.py file. Write a function called sumdivisors that takes a single integer input argument N. The function must return the sum of all positive integers that evenly divide into N. That is, the sum of every number X where N divided by X produces no remainder. For example, if N is 9, the function would return 13 (1 + 3 + 9). If N was 18, the function would return 39 (1 + 2 + 3 + 6 + 9 + 18).

Part 2 [15 marks]

Write the code for this part in the part2.py file. For this problem, you are given several files (volumes0.txt – volumes4.txt) in the 'exam' directory that contain the dimensions of boxes. The structure of each of these files will contain three lines of information for each box, representing the length, width, and height of the box, respectively. So, the first/second/third line of the file contain the length/width/height of box #1, the fourth/fifth/sixth lines contain the length/width/height of box #2, etc.

Write a function called largestvolume that takes a single string input argument representing a filename. This function must return the largest volume of any box from the given file. Note that the volume of a box can be computed as `length x width x height`. You can assume that any filename you are given will represent a file that follows the specified structure. As an example, the largest volume of a box for the file volumes0.txt should be 4680.