**Fall 2020 IT 166 Assignment 2 (30 points)**

**Due: September 16 at 11:55 PM**

Problem 1:

Please refer to the Python file.

Problem 2:

The Manhattan and Euclidean distances between two vectors, x (x={x1, x2,…, xn}) and y (y={y1, y2,…, yn}), are defined as follows:

Use list comprehension to generate two lists that have the same length. Use them as the two vectors to compute the Manhattan and Euclidean distances between them.

Problem 3

Please refer to the Python file.

Problem 4

Please refer to the Python file.

Requirements:

1. Download the assignment2.py file and provide your solutions to the problems.
2. For problem 1, print out the values (mean, median, minimum, maximum) with descriptions, such as “The mean of the list is xxxx”.
3. For problem 2, print out the results of the two distances with proper descriptions.
4. For problem 3, print out the sorted list.
5. For problem 4, print out the word count dictionary.