

CMPE 211 - Data Structures and Algorithms

Lab Exercise

You are given `ThreeSum`, `ThreeSumFast`, `StopWatch` and `Test` classes.

1. Examine the `ThreeSum` and `ThreeSumFast` algorithms, understand what they do, how they work and examine the differences between them.
2. Implement `TwoSum` and `TwoSumFast` algorithms based on `ThreeSum` and `ThreeSumFast` algorithms.
3. Calculate all four algorithms' running times analytically.
4. Compare their running times experimentally with different data sets given in `Test` class.

Bonus: What if we had duplicate values in the dataset? How should we modify the code in order to deal with duplicate data?