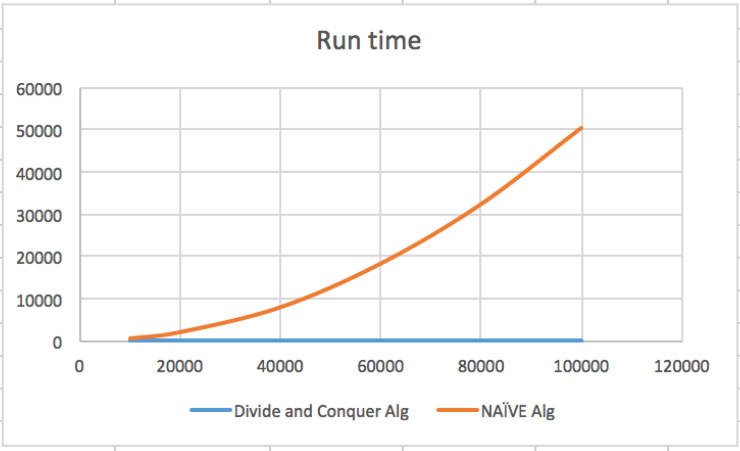
README

In this lab, the most difficult problem is to show the points with the shortest distance. For me, it is not very hard to come up the codes which just show the shortest distance among the points. When I tried to print out the points, everything went wrong. Either that he DC algorithm is not faster than the naïve algorithm, or it can not get results at all. Luckily, after discussing with my classmates, I made some progress.

	10000	20000	40000	60000	80000	100000
Divide and Conquer Alg	33	63	82	101	126	132
NAÏVE Alg	553	2053	7941	18284	32338	50374



As the picture shows, when input is large enough, the DC algorithm is much faster than the naïve algorithm.

In the third section, I repeat my code several thousands of times depending on the input number. Smaller the input number, larger the repeating time. And I can find out that the crossover point is approximately at 350.