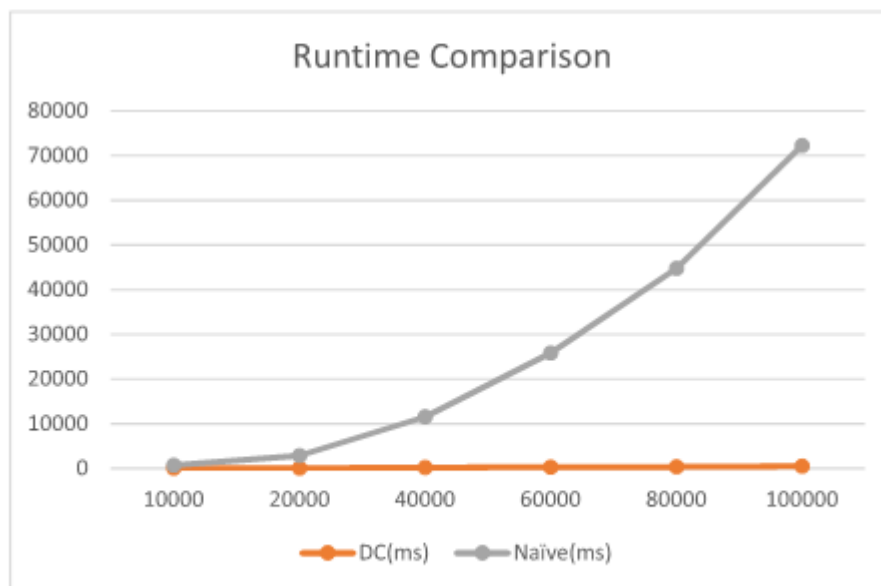


## Part 1

Points	DC(ms)	Naïve(ms)
10000	61	726
20000	109	2898
40000	197	11556
60000	323	25853
80000	398	44802
100000	514	72292



## Part 2

DC Algorithm with input running for 50000 times:

Input form	mean	min	max	average
Random	52	226	32	10.39
Same	49	207	35	10.92

From the chart above we can see no great difference appears upon different type of input.

## Part 3

Crosspoint

Input	50	100	150	200	250	300	350	400	450
Naive	1	3	2	4	5	5	7	8	11
DC	6	6	6	5	6	6	7	7	8

From the chart above I estimate the crosspoint locate in the interval[300,400],so I further my search in this interval. Each output listed below is the average of 100 running times upon same input.

Input	310	320	330	340	350	360
Naive	5.2	5.5	5.8	5.9	6.3	6.7
DC	5.8	6.0	6.1	6.2	6.3	6.5

Therefore, the crosspoint is 350.