

## 1. running time vs input size (CPU time's unit been modified to millisecond)

Input size	IS		MS		QS		HS	
	CPU time (ms)	Memory (KB)	CPU time (ms)	Memory (KB)	CPU time (ms)	Memory (KB)	CPU time (ms)	Memory (KB)
4000.case2	0	12500	2	12500	11.998	12612	2.999	12500
4000.case3	14.998	12500	1	12500	11.998	12520	1	12500
4000.case1	7.999	12500	2	12500	1	12500	1	12500
16000.case2	0	12648	4.999	12648	320.951	13324	2	12648
16000.case3	149.977	12648	4.999	12648	240.96.	12952	2	12648
16000.case1	121.982	12648	5.999	12648	1.999	12648	1.999	12648
32000.case2	0	12648	16.997	13020	1025.84	14052	2.999	12648
32000.case3	891.864	12648	17.998	13020	834.873	13316	3	12648
32000.case1	486.926	12648	11.998	13020	4.998	12648	2.999	12648
1000000.case2	2.999	18668	477.928	26384	> 10 mins		116.982	18668
1000000.case3	> 10 mins		490.926	26384	> 10 mins		106.984	18668
1000000.case1	125878	18668	412.937	26384	104.984	18668	192.971	18668

## 2. figures of growth of running time (data point ignored if running time &gt; 10 mins)



