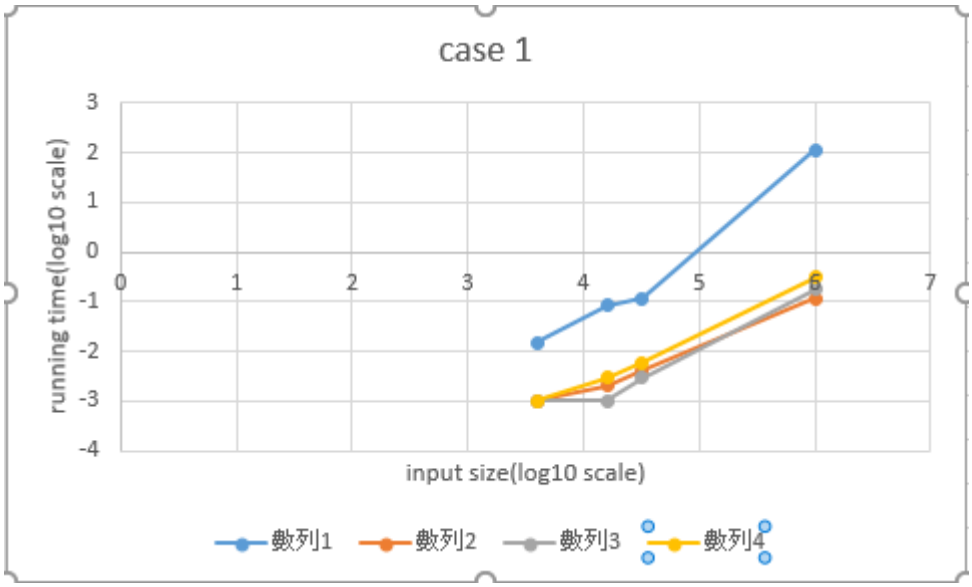
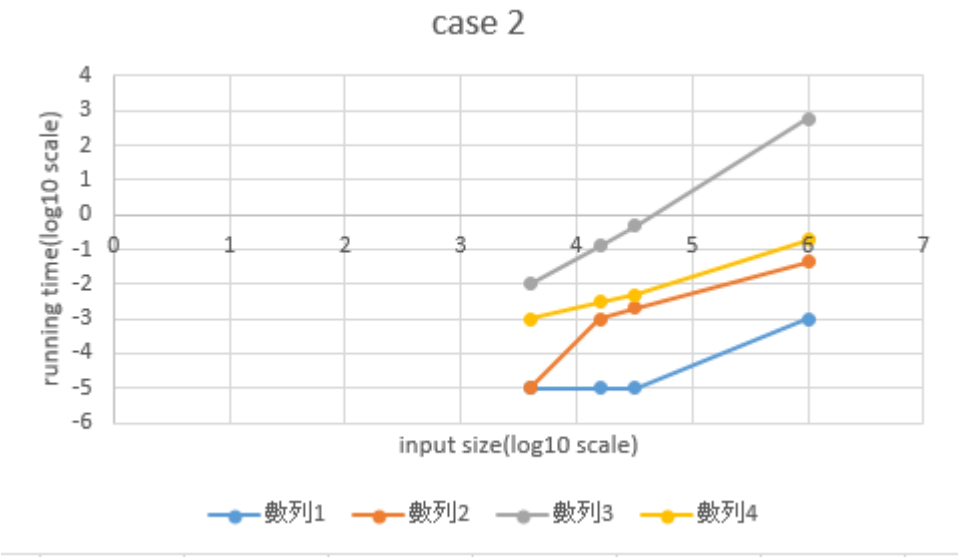
Input size	IS		MS		QS		HS	
	CPU time (s)	Memory (KB)	CPU time (s)	Memory (KB)	CPU time (s)	Memory (KB)	CPU time (s)	Memory (KB)
4000.case2	0	12500	0	12500	0.009999	12616	0.001	1250
4000.case3	0.019998	12500	0	12500	0.011998	12516	0	1250
4000.case1	0.014997	12500	0.001	12500	0.001	12500	0.001	1250
16000.case2	0	12648	0.001	12648	0.12998	13328	0.003	1264
16000.case3	0.160976	12648	0.001	12648	0.13198	12948	0.002	1264
16000.case1	0.082987	12648	0.001999	12648	0.000999	12648	0.003	1264
32000.case2	0	12648	0.002	12700	0.471928	14076	0.004999	1264
32000.case3	0.241964	12648	0.001	12696	0.416936	13312	0.003999	1264
32000.case1	0.116982	12648	0.003999	12700	0.002999	12648	0.005999	1264
1000000.case2	0.001	18668	0.044993	20456	over 10 mins	---	0.184972	1866
1000000.case3	224.357	18668	0.041994	20456	over 10 mins	---	0.187971	1866
1000000.case1	112.182	18668	0.116982	20448	0.174974	18668	0.314952	1866

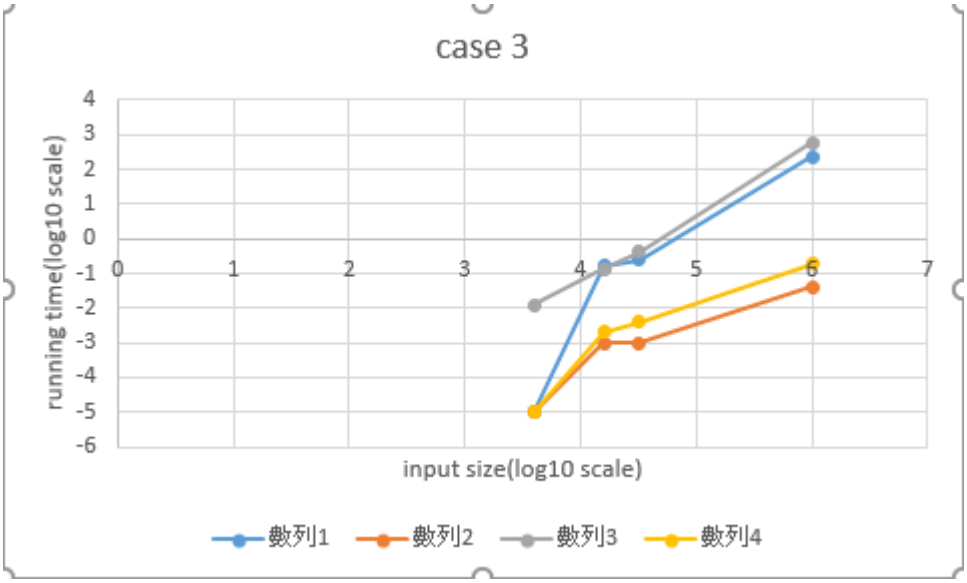
Growth of running time(數列 1,2,3,4 分別代表 insertion, merge, quick,heap sort):



以 average case 來說 insertion sort 成長最快，其他三種則差不多



Quick sort 的 worst case 成長最快，其他三者為 best case



Quick sort 和 insertion sort 都是 worst case 成長最快，其他兩者的 worst case 成長則較慢。