Algorithm, pa1

Kuo Hao Wang, b07901032, alg20069

I. Table

		IS		MS		QS		HS	
size	case	CPU time	Memory						
		(ms)	(KB)	(ms)	(KB)	(ms)	(KB)	(ms)	(KB)
4000	2	0	0	0	0	0	0	0	0
	3	15.625	0	0	0	0	0	0	0
	1	0	0	0	0	15.625	0	0	0
16000	2	0	0	0	0	31.25	0	0	0
	3	78.125	0	0	0	31.25	0	0	0
	1	46.875	0	0	0	31.25	0	0	0
32000	2	0	0	0	0	62.5	0	15.625	0
	3	281.25	0	0	0	62.5	0	0	0
	1	140.625	0	0	0	46.875	0	0	0
1000000	2	0	0	78.125	0	1265.62	0	93.75	0
	3	299609	0	78.125	0	1125	0	93.75	0
	1	132156	0	156.25	0	1296.88	0	171.875	0

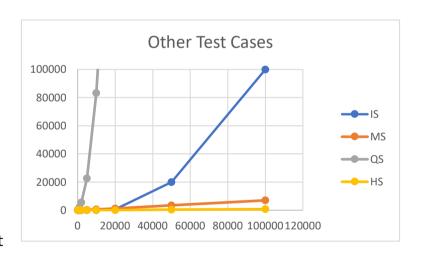
We can observe that it actually take no time for IS to sort sorted sequence (best case).

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II. Graph

In other test cases, I aimed for evaluate average performance, where we found that my QS was not good under n<100000 and heap is always good under given cases. I think there is a huge room for improvement in my code.

III.



150000

100000

---IS
---MS
---QS
---HS

1000000

1500000

500000