Algorithm PA1

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1. Compare runtime (running local)

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	0.018	5904	0.631	6048	0.095	5904	0.127	5904
4000.case3	11.508	5904	0.633	6048	0.103	5904	0.142	5904
4000.case1	7.281	5904	1.036	6048	0.255	5904	0.178	5904
16000.case2	0.019	6056	2.445	6216	0.369	6056	0.576	6056
16000.case3	179.511	6056	2.441	6216	0.393	6056	0.588	6056
16000.case1	92.014	6056	3.406	6216	0.736	6056	0.709	6056
32000.case2	0.039	6188	4.928	6256	0.726	6188	1.269	6188
32000.case3	728.202	6188	4.908	6256	0.777	6188	1.243	6188
32000.case1	358.516	6188	6.99	6256	1.423	6188	1.43	6188
100000.case2	0.509	12144	154.462	18288	23.949	12144	53.291	12144
100000.case3	711958	12144	161.09	18288	26.358	12144	54.274	12144
100000.case1	355824	12144	226.657	18288	58.754	12144	85.263	12144

2. Trend line

The plots are in the next page.

Basically, the tendency is the same as the one shown in pa1.pdf, although the lines are not that linear.

(I think it is because I ran it local, there must be some hardware limitation)

QS, MS, HS have almost the same tendency.

IS is faster in best case, slower in worst case and average case.