演算法PA1

B10901176 蔡弘祥

EDA union lab machines port:40062

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | 0.000152 | 6060 | 0.000906 | 6060 | 0.019153 | 6060 | 0.000769 | 6060 |
| 4000.case3 | 0.011597 | 6060 | 0.000961 | 6060 | 0.017369 | 6060 | 0.000808 | 6060 |
| 4000.case1 | 0.006362 | 6060 | 0.001779 | 6060 | 0.000983 | 6060 | 0.000982 | 6060 |
| 16000.case2 | 0.000203 | 6212 | 0.003396 | 6212 | 0.127895 | 6312 | 0.003292 | 6212 |
| 16000.case3 | 0.0784 | 6212 | 0.004189 | 6212 | 0.121475 | 6212 | 0.00324 | 6212 |
| 16000.case1 | 0.045003 | 6212 | 0.005427 | 6212 | 0.003962 | 6212 | 0.003564 | 6212 |
| 32000.case2 | 0.000267 | 6344 | 0.004951 | 6344 | 0.466568 | 6604 | 0.005735 | 6344 |
| 32000.case3 | 0.268139 | 6344 | 0.006228 | 6344 | 0.438814 | 6372 | 0.004667 | 6344 |
| 32000.case1 | 0.136844 | 6344 | 0.009516 | 6344 | 0.006736 | 6344 | 0.006128 | 6344 |
| 1000000.case2 | 0.00149 | 12300 | 0.098402 | 14160 | 330.104 | 24012 | 0.102136 | 12300 |
| 1000000.case3 | 184.383 | 12300 | 0.091255 | 14160 | 210.666 | 15244 | 0.098282 | 12300 |
| 1000000.case1 | 90.292 | 12300 | 0.185339 | 14169 | 0.108647 | 12300 | 0.159521 | 12300 |

IS：For the best case, IS performs better than others. However, for the worst case and the average case, it does not perform well.

MS：For the best case, MS performs better than QS but worse than IS and roughly same as HS. For the worst case and average case, it has the best performance.

QS：For the average case, QS performs better than others. However, for the best case and worst case, it is slower than both MS and HS.

HS：For the best case, HS performs better than QS but worse than IS and roughly same as MS. For the worst case and average case, it has the best performance.