[Alg20] PA1 report

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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 > 10 mins)