|  |  |  |  |
| --- | --- | --- | --- |
| Method | Statement count formula | My estimate | Empirical result |
| methodA | O(n3) | n = 250 🡪 15 ms  n = 500 🡪 30 ms  n = 1000 🡪 60 ms  n = 2000 🡪 100 ms | n = 250 🡪 114.0 ms  n = 500 🡪 895.0 ms  n = 1000 🡪 7127.0 ms  n = 2000 🡪 58028.0ms |
| methodB | O(n) | n = 250 🡪 1 ms  n = 500 🡪5 ms  n = 1000 🡪10 ms  n = 2000 🡪 20 ms | n = 250 🡪 0.006 ms  n = 500 🡪 0.009 ms  n = 1000 🡪 0.018 ms  n = 2000 🡪 0.044 ms |
| methodC | O(n log n) | n = 250 🡪 5 ms  n = 500 🡪 10 ms  n = 1000 🡪 20 ms  n = 2000 🡪 40 ms | n = 250 🡪 2.0 ms  n = 500 🡪 5.0 ms  n = 1000 🡪 10.0 ms  n = 2000 🡪 23.0 ms |

**PART 2:**