Answer to Part e

|  |  |  |  |
| --- | --- | --- | --- |
| Sequence Length | Memory Use | Time Spent (micro sec) | Time Spent (mm:ss) |
| 50 | 368 KB | 3671 | 00:00.00 |
| 100 | 484 KB | 3446 | 00:00.00 |
| 250 | 1.1 MB | 12400 | 00:00.01 |
| 500 | 3.3 MB | 39786 | 00:00.04 |
| 1000 | 8.2 MB | 150975 | 00:00.15 |
| 1500 | 19.0 MB | 345240 | 00:00.30 |
| 2000 | 31.6 MB | 602028 | 00:00.60 |
| 20000 | 1.53 GB | 79665422 | 01:19.67 |

Notes: This shows both a polynomial time and space complexity of at least O(n2)