|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Items | Unstable Sort | Stable Sort | Recursive Merge Sort | Non-recursive Merge Sort | MT Stable Sort | MT Recursive Merge Sort | MT Non- Recursive Merge Sort |
| 100,000 | 0.046 | 0.032 | 0.062 | 0.016 | 0.008 | 0.187 | 0.016 |
| 1,000,000 | 0.344 | 0.437 | 0.781 | 0.109 | 0.234 | 2.313 | 0.016 |
| 10,000,000 | 3.749 | 4.734 | 8.204 | 1.203 | 1.75 | 20.14 | 0.281 |
| 100,000,000 | 42.797 | 53.375 | 83.047 | 9.907 | 15.015 | 163.766 | 2.359 |
| 1,000,000,000 | ~460 (est) | ~580 (est) | ~820 (est) | ~72(est) | ~35 (est) | ~1500 (est) | ~23 (est) |

Items are 1:1. Times are in seconds (s). Eight (8) threads were run in these tests.

In an all instances comparison, non-recursive merge sort appears to consistently outperform all other methods.