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CS302

Proj4-Report

**Bubble Sort O(n)**

|  |  |  |  |
| --- | --- | --- | --- |
| Values | Time(seconds) | Comparisons | Swaps |
| 1,000 | .0012 | 46,762 | 11,568 |
| 10,000 | .8631 | 4,102,103 | 1,600,630 |
| 100,000 | 133.042 | 350,095,822 | 1,315,776,208 |

**After Sorting:**

Time(seconds): 0

Comparisons: 999

Swaps: 0

**Quick Sort O(nlogn)**

|  |  |  |  |
| --- | --- | --- | --- |
| Values | Time(seconds) | Comparisons | Swaps |
| 1,000 | .003 | 10,741 | 10,491 |
| 10,000 | .1839 | 713,747 | 710,518 |
| 100,000 | 3.7715 | 49,820,751 | 49,563,192 |

**After Sorting:**

Time(seconds): 0

Comparisons: 314439

Swaps: 299241