Merge Sort Report

CS6301.gn42

The times for different data size and different algorithm has been showed below. Please noted that we try each program several times and only the average running time is presented.

|  |  |  |
| --- | --- | --- |
| Avg.(ms) | Generic Type ***MergeSort*** | Generic Type ***InsertionSort*** |
| 1 M | 96 | 1951828 |
| 5 M | 257 | n/a |
| 9 M | 464 | n/a |
| 13 M | 602 | n/a |
| 16 M | 753 | n/a |

Obviously, the insertion sort, as a n-square algorithm is much slower than merge sort, as a n-logn algorithm. The time consumed by Insertion Sort is unacceptable after the data size larger than 5 Mega bit.