

1. I have used two sorting algorithms. One is Quick sort, the other is Merge sort.
2. First, I have use buffer Reader to put every number in to the array line by line.
3. Then translate every element into integer.
4. Comparing the sorting time, then go and sort the whole array.
5. Consider we need 4 digits output, so I used Decimal Format to add "0" on th right hand side.
6. Checking if the file does not exists
7. Merge sort is faster than quicksort sometimes. But doesn' t have huge different. I have tested 10 times. Quicksort always faster than merge in this case. So I finally chosen quicksort.
8. I have used SortingAlgorithm.java for interface the algorithms.
9. I have used SortingFactory.java for calling methods.
10. Every Sorting algorithm is implemented in SortingAlgorithm.java