2018.5.21 BubbleSort.java, SelectionSort.java; InsertionSort.java

Array

Sort:

Unstable sort is the relative of duplicate items will not be preserved.

Stable sort is the relative ordering was preserved.

Bubble sort： O(n^2); Stable sort

Selection sort: O(n^2); Unstable sort

2018.5.22: InsertionSort.java; ShellSort.java; Factorial.java

Insertion sort: O(n^2); Stable sort

Shell sort: O(n^2) worst case, but can perform better than that; Unstable algorithm

Merge Sort: O(nlogn)

2018.5.23: MergeSort.java

2018.5.23 QuickSort.java

Quick sort: in-place sort; O(nlogn); unstable;

Counting sot: not in-place sort; O(n); Works when the number of values want to sort= number ranges;