# Discussing advantage and disadvantage Three sorting algorithm

### Bubble Sort

Check the number on the left if is greater or less than the number on the right, if greater, the two numbers they get swap and if less they don’t get swap.

Advantage: easy to understand, no large amount of memory, easy implementation.

Disadvantage: long time to sort

**Selection Sort**

The array is divided in two sections, sorted where all sorted number goes and unsorted where all the unsorted numbers are. This method identify the minimum value in the unsorted section and place it in the sorted section and repeat this process until the unsorted section is empty.

Advantage: the arrangement doesn’t affect the performance and uses less operation so is economical if the data movement is costly.

Disadvantage: to slow in big data

**Merge Sort**

Dividing the array in the multiple subarrays which each subarray get sorted and then merge together in one sorted array. Advantage: the size of the file doesn’t affect the performance.

Disadvantage: additional storage memory required.