Why Sorting?

Applications

- Uniqueness-Test
- Median/Selection (can be also be done in linear time)
- Sets: Intersection/Union
- Efficient Searching: Binary search
Algorithms

- Stable vs. Unstable
- Insertion-Sort, $O(n^2)$
- Bubble-Sort, $O(n^2)$
- Quick-Sort, $O(n \log n)$ (in average)
- Merge-Sort, $O(n \log n)$
- Heap-Sort, $O(n \log n)$

In practice

Use sort-function of the libraries available for your programming language, for example sort of STL.