

1. **transform** the input **into** the output

2. sort a sequence of numbers into **nondecreasing** order

3. This problem **arises frequently in practice** and **provides fertile ground** for **introducing** many standard design techniques and analysis tools.

4. A **permutation(reordering)** $\langle a'_1, a'_2, \dots, a'_n \rangle$ of the input sequence **such that** $a'_1 \leq a'_2 \leq \dots \leq a'_n$.

5. In general, an instance of a problem consists of the input (satisfying whatever **constraints** are **imposed** in the problem statement) needed to compute a solution to the problem.

6. **at our disposal**

7. Which algorithm is **best** for a given application depends on - among other factors - the number of items to be sorted, the extent to which the items are already somewhat sorted, possible restrictions on the item values, the architecture of the computer, and the kind of storage devices to be used: main memory, disks, or even tapes.

8. **halt with** correct output

9. **Contrary to** what you might expect,...

10. **Ordinarily**,...

11. control their **error rate**

12. beyond the scope of