DSA

Array?

An array is a data structure used to store multiple elements of same datatype.

Arrays are used by many algorithms.

**Bubble Sort:**  
A sorting method that compares **each pair of neighboring numbers** and swaps them if they are in the wrong order. It repeats this until the entire list is sorted.

**Selection Sort:**  
A sorting method that finds the **smallest number** in the list and places it at the beginning. It repeats this process for the rest of the list.

**Simple Difference Table**

| **Feature** | **Bubble Sort** | **Selection Sort** |
| --- | --- | --- |
| **Definition** | Swaps neighboring numbers until sorted | Picks smallest number and puts in place |
| **How it works** | Compares and swaps **adjacent** items | Finds **minimum** and swaps once per pass |
| **Swapping** | Many swaps | Fewer swaps |
| **Efficiency** | Slower for large lists | Slightly better than bubble sort |