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| --- | --- | --- | --- | --- | --- | --- |
| **Algorithm** | **Best Time Complexity** | **Worst Time Complexity** | **Average Time Complexity** | **Space Complexity** | **Stability** | **Remarks** |
| **Bubble**  **Sort** | O(n) | O(n^2) | O(n^2) | O(1) | Stable | Best when the array is already sorted. Poor performance for large inputs. |
| **Insertion Sort** | O(n) | O(n^2) | O(n^2) | O(1) | Stable | Performs better than Bubble Sort for nearly sorted arrays. |
| **Selection Sort** | O(n^2) | O(n^2) | O(n^2) | O(1) | Unstable | Simple implementation, but always performs O(n^2) comparisons. |