SORTING CUSTOMER ORDERS

UNDERSTANDING SORTING ALGORITHM & ANALYSIS:

Different Sorting algorithms:

Bubble sort:

- Simple to implement but inefficient for large data handling.
- Best case -O(n) , Space complexity – O(1)

Insertion Sort:

- It is good for nearly sorted data .
- Best case -O(n) , Space complexity – O(1)

Quick Sort:

- It is fastest in most practical cases but not stable for all.
- Best case -O(n logn) , Space complexity – O(log n)

Quick Sort:

- It is good for linked list and offers stable soring .
- Best case -O(n logn) , Space complexity – O(log n)

Why quick sort is preferred over bubble sort:

1. Much faster than bubble sort for large input.
2. Divide and conquer method that sort quickly.
3. It is easy to implement in real world libraries.