**Algorithm**

Input the required items and their reorder cost per unit

1. Sort items by reorder cost per unit (ascending).
2. Iterate over each item:
   * If current\_stock < forecasted\_demand, compute required units.
   * Round up to the nearest batch size.
   * Calculate reorder cost.
3. Store the item ID and units to order and reorder cost.
4. Return the final reordering plan.

**Sample Run**

Given:

plaintextCopyEditItems = [  
    {item\_id: 1, current\_stock: 10, forecasted\_demand: 20, reorder\_cost\_per\_unit: 5, batch\_size: 10},  
    {item\_id: 2, current\_stock: 15, forecasted\_demand: 30, reorder\_cost\_per\_unit: 3, batch\_size: 5}  
]

The output should be:

plaintextCopyEditReorder Plan:  
Item 1 -> Order 10 units  
Item 2 -> Order 20 units  
Total Reordering Cost = (10 \* 5) + (20 \* 3) = $110

**Flow Chart**

Flowchart is given below:

A black and white rectangular object with text

AI-generated content may be incorrect.