Algorithm Steps:

1. Main Program

- **Start**
- **Open** the stock file (`stock.dat`)
    - If the file does not exist, **create** a new stock file
- **Display Menu** and **wait for user input**

2. Add Stock Item

- **Input**: Item details (ID, Name, Quantity, Price)
- **Store Current Date and Time**
- **Write** item details to `stock.dat`
- **Log** addition to `updateHistory.dat`
- **Display Confirmation Message**

3. View Stock Item

- **Input**: Item ID
- **Search** in `stock.dat`
    - If item exists, **display** details
    - Else, **display** "Item not found"

4. Update Stock Item

- **Input**: Item ID
- **Search and Modify** item in `stock.dat`
    - If item exists:
        - **Input** new details
        - **Store Current Date and Time**
        - **Write** updated details to `temp.dat`
        - **Log** update to `updateHistory.dat`
    - Else, **display** "Item not found"
- **Replace** `stock.dat` with `temp.dat`
- **Display Confirmation Message**

5. Delete Stock Item

- **Input**: Item ID
- **Search and Remove** item in `stock.dat`
    - If item exists:
        - **Write** remaining items to `temp.dat`
        - **Log** deletion to `updateHistory.dat`
    - Else, **display** "Item not found"
- **Replace** `stock.dat` with `temp.dat`
- **Display Confirmation Message**

6. List All Stock Items

- **Read** and **Display** all items in `stock.dat`

7. Generate Low Stock Report

- **Input**: Quantity Threshold
- **Search and Display** items in `stock.dat` with quantity below threshold

8. View Update History

- **Read** and **Display** all entries from `updateHistory.dat`

9. Exit Program

- **Close** all files
- **End**