

# Pseudocode: Inventory Management System

START

FUNCTION main\_menu

    LOOP infinitely

        DISPLAY "---INVENTORY SYSTEM---"

        DISPLAY menu options:

            [1] Add New Stock

            [2] Process Sale

            [3] View Inventory

            [4] Exit

        PROMPT user for choice

        IF choice is "1"

            CALL add\_new\_stock

        ELSE IF choice is "2"

            CALL process\_sale

        ELSE IF choice is "3"

            CALL view\_inventory

        ELSE IF choice is "4"

            DISPLAY "Exiting..."

            BREAK the loop

        ELSE

            DISPLAY "Invalid selection"

FUNCTION add\_new\_stock

    LOOP

        PROMPT for item name

        LOOP UNTIL valid quantity is entered

            PROMPT for quantity

            IF quantity is not a number

                DISPLAY "Invalid input"

            ELSE

                CONVERT quantity to integer

                BREAK loop

        LOOP UNTIL valid date is entered

            PROMPT for purchase date (YYYY-MM-DD)

            IF date is not in valid format or contains invalid values

                DISPLAY "Invalid date format"

ELSE

BREAK loop

ADD item (name, quantity, date) to inventory

LOOP UNTIL valid yes/no input is given

PROMPT "Add another item? (yes/no)"

IF input is "yes"

CONTINUE loop

ELSE IF input is "no"

DISPLAY "Stock added successfully!"

RETURN

ELSE

DISPLAY "Invalid input"

FUNCTION process\_sale

LOOP

PROMPT for item name

IF item not found in inventory

DISPLAY "Item not found"

CONTINUE loop

LOOP UNTIL valid quantity is entered

PROMPT for quantity to sell

IF not a number

DISPLAY "Invalid input"

ELSE

CONVERT to integer

BREAK

CALCULATE total available quantity for that item

IF available >= quantity to sell

SET remaining = quantity to sell

SORT inventory items manually by date (oldest first)

FOR each item in inventory

IF item name matches

IF item quantity <= remaining

SUBTRACT item quantity from remaining

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        SET item quantity to 0
    ELSE
        SUBTRACT remaining from item quantity
        SET remaining to 0
    IF remaining == 0
        BREAK

    REMOVE all items from inventory with quantity == 0

    DISPLAY "Sale processed successfully!"
    BREAK
ELSE
    DISPLAY "Insufficient stock"

FUNCTION view_inventory
    DISPLAY "Inventory List"
    IF inventory is empty
        DISPLAY "No items in inventory"
    RETURN

    SORT inventory by purchase date in ascending order (oldest first)

    DISPLAY table headers

    FOR each item in inventory with index
        DISPLAY item number, name, quantity, and purchase date

CALL main_menu

END

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