**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

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