

Alogrithm- SIMPLE Inventory Management System

BEGIN

Define Item as STRUCTURE

 STRING name
 FLOAT price
 INTEGER quantity

END STRUCTURE

Define Inventory as LIST

Inventory=EMPTY_LIST

add_item()

RETURNS void

START

 PRINT "Enter item name: "
 READ name
 PRINT "Enter item price: "
 READ price
 PRINT "Enter item quantity: "
 READ quantity

 Define new_item as Item

 new_item.name = name

 new_item.price = price

 new_item.quantity = quantity

 // Add the new item to the inventory list

 APPEND new_item TO inventory

 PRINT "Item added successfully."

END

view_all_items()

RETURNS void

START

 IF LENGTH(inventory) == 0 THEN
 PRINT "Inventory is empty."

 ELSE

 PRINT "Inventory List:"

 FOR EACH item IN inventory

 PRINT "Name: " + item.name + ", Price: \$" + item.price + ", Quantity: " +

item.quantity

 END FOR

 END IF

END

update_quantity()

RETURNS void

START

 PRINT "Enter the name of the item to update: "

 READ search_name

 // Using FOR loop with index

 FOR i = 0 TO LENGTH(inventory) - 1

 IF inventory[i].name == search_name THEN

 PRINT "Current quantity for " + inventory[i].name + " is: " + inventory[i].quantity

 PRINT "Enter new quantity: "

 READ new_quantity

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        inventory[i].quantity = new_quantity
        PRINT "Quantity updated successfully."
        RETURN
    END IF
END FOR

PRINT "Item not found."
END

main()
RETURNS void
START
    WHILE TRUE
        // Display menu options to the user
        PRINT "Inventory Management System"
        PRINT "1. Add a new item"
        PRINT "2. View all items"
        PRINT "3. Update an item's quantity"
        PRINT "4. Search for an item"
        PRINT "5. Exit"
        PRINT "Choose an option (1-5): "

        READ choice

        IF choice == 1 THEN
            add_item()
        ELSE IF choice == 2 THEN
            view_all_items()
        ELSE IF choice == 3 THEN
            update_quantity()
        ELSE IF choice == 4 THEN
            search_item()
        ELSE IF choice == 5 THEN
            PRINT "Thank you for using the Inventory Management System."
            BREAK
        ELSE
            PRINT "Invalid option. Please try again."
        END IF
    END WHILE
END

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