 // Define the Inventory Management System

// Function to add an item to the inventory

function addItem(inventory, item) {

    // Check if the item already exists in the inventory

    const existingItem = inventory.find(i => i.id === item.id);

    if (existingItem) {

        console.log('Item with this ID already exists.');

        return;

    }

    inventory.push(item);

    console.log('Item added:', item);

}

// Function to update an item in the inventory

function updateItem(inventory, id, newDetails) {

    // Find the index of the item with the given ID

    const index = inventory.findIndex(i => i.id === id);

    if (index === -1) {

        console.log('Item not found.');

        return;

    }

    // Update the item with new details

    inventory[index] = { ...inventory[index], ...newDetails };

    console.log('Item updated:', inventory[index]);

}

// Function to delete an item from the inventory

function deleteItem(inventory, id) {

    // Find the index of the item with the given ID

    const index = inventory.findIndex(i => i.id === id);

    if (index === -1) {

        console.log('Item not found.');

        return;

    }

    // Remove the item from the inventory

    const removedItem = inventory.splice(index, 1);

    console.log('Item removed:', removedItem[0]);

}

// Function to get an item from the inventory

function getItem(inventory, id) {

    // Find and return the item with the given ID

    const item = inventory.find(i => i.id === id);

    if (!item) {

        console.log('Item not found.');

        return null;

    }

    return item;

}

// Function to print the inventory

function printInventory(inventory) {

    console.log('Inventory List:');

    inventory.forEach(item => {

        console.log(`ID: ${item.id}, Name: ${item.name}, Quantity: ${item.quantity}, Price: ${item.price}`);

    });

}

// Example usage:

// Initialize an empty inventory

let inventory = [];

// Add some items

addItem(inventory, { id: 1, name: 'Laptop', quantity: 10, price: 999.99 });

addItem(inventory, { id: 2, name: 'Phone', quantity: 20, price: 499.99 });

// Print the inventory

printInventory(inventory);

// Update an item

updateItem(inventory, 1, { quantity: 8, price: 949.99 });

// Get an item

console.log('Get Item:', getItem(inventory, 1));

// Delete an item

deleteItem(inventory, 2);

// Print the updated inventory

printInventory(inventory);