

Assignment: The "Unified Inventory" Challenge

Scenario:

You are a developer for a retail chain that has just acquired a competitor. You have two separate lists of inventory items: one from your Main Store and one from the Acquired Store.

Your specific task is to merge these inventories, clean up the data, and generate a final report on value.

1. The Starter Data:

Copy and paste this code into your editor to begin:

```
const mainStoreInventory = [
  { name: "Laptop", price: 1200, stock: 5 },
  { name: "Mouse", price: 25, stock: 0 },
  { name: "Keyboard", price: 100, stock: 12 }
];

const acquiredStoreInventory = [
  { name: "Monitor", price: 300, stock: 8 },
  { name: "Headphones", price: 50, stock: 0 },
  { name: "Webcam", price: 75, stock: 20 }
];
```

2. The Tasks:

Step 1: Merge the Arrays

- Create a new array called `unifiedInventory`.
- **Requirement:** You **must** use the **Spread Operator** to combine `mainStoreInventory` and `acquiredStoreInventory` into this single array.

Step 2: Clean the Data (Filter)

- From `unifiedInventory`, create a new array called `inStockItems`.
- **Requirement:** Use the `.filter()` method to remove any items that have a stock of 0.

Step 3: Apply a Price Adjustment (Map)

- The company wants to apply a "Grand Opening" discount. Create a new array called `discountedInventory`.
- **Requirement:** Use the `.map()` method on `inStockItems`.
- Decrease the price of every item by **10%**. (Return a new object for each item with the updated price).

Step 4: Calculate Total Value (Reduce)

- Calculate the total monetary value of the entire *discounted* inventory (Price \times Stock).
- **Requirement:** Use the `.reduce()` method to return a single number representing the total value.

3. Expected Output

When you log your final result to the console, it should look close to this:

Plaintext

Total Inventory Value: 9135

(Note: 1200 becomes $1080 * 5 = 5400$, 100 becomes $90 * 12 = 1080$, etc.)