# **🛒 Problem Statement: Shopping Cart / Billing System**

Write a Python program to simulate a **shopping cart billing system** at a supermarket.

## **✅ Requirements**

1. **Show Products**
   1. Display a product list with item names and prices (e.g., Milk ₹40, Rice ₹100, Oil ₹200, etc.).
   2. Allow the user to view and select items.
2. **Add to Cart**
   1. User can select multiple items (loop until they choose to stop).
   2. For each item, ask for **quantity**.
   3. Store selected items and quantities in a **cart**.
3. **Checkout**
   1. At checkout, calculate the total bill.
   2. Apply **discounts and GST** as per billing rules.
   3. Show a **detailed bill** with all items, total, discount, GST, and net payable.

## **💰 Billing Rules**

1. If total bill > **₹2000**, apply a **10% discount**.
2. Add **5% GST** on the (total − discount).
3. Final output must display:
   1. List of items purchased with quantities and prices.
   2. Total amount before discount.
   3. Discount applied (if any).
   4. GST added.
   5. **Net payable amount**.

## **🔹 Concepts to Use**

1. **Functions**
   1. show\_products() → Displays available products and prices.
   2. add\_to\_cart() → Lets user pick items and quantities.
   3. calculate\_bill() → Applies discount, GST, and prepares final bill.
   4. shopping\_cart() → Main function that controls the flow.
2. **Loops**
   1. Use a loop to allow the user to keep adding items until they type "no" or "checkout".
3. **Conditions**
   1. If bill > 2000 → apply discount.
   2. Else → no discount.
   3. Apply GST in all cases.
4. **Data Structures**
   1. Use a **dictionary** or **list of tuples** to store products and prices.
   2. Use another dictionary to maintain the cart (e.g., { "Milk": 2, "Rice": 1 }).
5. **Arithmetic Operations**
   1. Calculate subtotal, discount, GST, and final amount.
6. **String Formatting**
   1. Print a clear and **neatly formatted bill**.