PROBLEM STATEMENT:

The problem statement for designing an online shopping platform's database involves creating a robust system to manage users, products, orders, payments, and carts. The goal is to build an efficient database schema that maintains data integrity, minimizes redundancy, and accommodates various relationships between entities. The system should allow users to Browse and purchase products,Maintain cart, Place orders, Make payments, Write reviews, View order history,Manage user accounts.

Key Features:

1.User Management: User profiles with personal details and addresses.

2.Product Catalog: Products with descriptions, prices, quantities, and categorization.

3.Order Processing: Ability for users to place orders with order details, linking products and users and also it allows users to check the status of orders (e.g., pending, shipped, delivered) that indicate their stage in the fulfillment process.

4.Payment Handling: Management of payment details

associated with orders.

5.Shopping Cart: Functionality for users to add/remove items from their carts.

6.Relationships: Implementing proper relationships between entities to accurately represent the interactions (like purchases,cart contents) between users and products.

ASSUMPTIONS:

1.Users are assumed to have unique usernames/emails and passwords for their accounts.

2.Products have distinct identifiers (like ProductID), and each product has a unique name and has count 1 in the website.

3. Users can place orders for only one cart at a time.

4.Different payment methods (credit/debit cards, online wallets, etc.) are accepted.

5.Users can add/remove multiple products from their carts before placing an order.

6.Products belong to specific categories or departments.

7.Orders can be placed only after adding the products to the cart.