Problem Statement

Develop an E-Commerce web application using Angular 16+ that provides a seamless shopping experience for users. The application should include the following features:

1. **Login/Registration**:
    - Allow users to create an account and log in to the application.
2. **Home Page/Product Listing Page (PLP)**:
    - Display a list of products.
    - Enable filtering of products by category and price.
    - Provide sorting options for the product list.
3. **Product Detail Page (PDP)**:
    - Show detailed information about a selected product.
4. **Transaction Success/Failure**:
    - Display appropriate messages for successful or failed transactions.
5. **Profile Page**:
    - Allow users to view and update their customer details.
    - Display the user's order history.

Objectives
- **User Authentication**: Securely manage user registration and login.
- **Product Management**: Efficiently display and manage product listings with filtering, sorting, and search capabilities.
- **User Experience**: Provide a user-friendly interface for viewing product details and managing transactions.
- **Profile Management**: Enable users to manage their personal information and view their order history.

Requirements
1. **Login/Registration**:
    - Implement user authentication using secure methods.
    - Provide forms for user registration and login.
2. **Home Page/PLP**:
    - Display a list of products with pagination.
    - Implement filters for category and price.
    - Provide sorting options (e.g., by price, popularity).
3. **Product Description Page**:
    - Display product images, descriptions, prices, and other relevant details.
    - Include a "Buy Now" button.
    - On click of Buy Now, user should be prompted to enter OTP. You can hardcode the correct OTP as **123456**. Any other OTP should land to transaction failure.
4. **Transaction Success/Failure**:
    - Show confirmation messages for successful transactions.
    - Display error messages for failed transactions.
5. **Profile Page**:
    - Allow users to view and edit their personal details.
    - Display a list of past orders with details.

Constraints
- Ensure the application is responsive and works on various devices.
- Use secure methods for handling user data and transactions.
- Optimize the application for performance and scalability.

Deliverables
- Unit Test cases
- **Try to complete as many functionalities as possible in the problem statement.**