QUESTION - 1

User Authentication System

Objective: Implement a secure authentication system using JWT (JSON Web Token).

Features:

- User registration and login with email & password.
- Hash passwords using **bcrypt.js** before storing in MongoDB.
- Use **JWT** to generate authentication tokens.
- Protect routes (e.g., user profile) using authentication middleware.
- Logout functionality by **clearing the token** from the frontend.

Implementation Steps:

1. Set up **Express.js + MongoDB (Mongoose)** backend and react,tailwindcss for frontend.

2. Create a **User model** with username, email, password, and timestamps.

3. Implement **bcrypt.js** to hash passwords before saving to the database.

4. Use **jsonwebtoken (JWT)** to issue and verify tokens.

5. Create a **React frontend** with forms for login and registration.

6. Store JWT in **localStorage**.

7. Protect private routes using **middleware** in Express.js.

8. Display username in home page