## Project Description: Student Account Management System

### Overview:

This project implements a basic account management system tailored for student use. It allows students to create accounts and login securely using predefined ID numbers and passwords. The system is designed to handle account creation, login authentication, and user interaction through a command-line interface.

### Features:

1. **Account Creation:**
    - Students can create accounts by entering a valid account number within a specified range (375 to 440) and setting a numeric password.
    - The system verifies the uniqueness of the account number and prompts the user to create a password.
2. **Login Authentication:**
    - Registered users can log in by entering their assigned account number and the corresponding password.
    - The system checks if the entered password matches the stored password associated with the account number.
3. **Error Handling:**
    - Provides error messages for invalid account IDs, incorrect passwords, and unrecognized user IDs during login attempts.
    - Ensures user-friendly prompts for retrying or confirming actions throughout the process.
4. **User Interface:**
    - The system utilizes a simple command-line interface (CLI) for user interaction, displaying prompts and messages to guide users through account creation and login processes.
    - Includes structured menu options (create account, login, and exit) for intuitive navigation.

### Implementation:

- **Programming Language:** C
- **Functions:** Includes a main function for program execution, an ID search function (`id`), and functions for account creation and login authentication.
- **Data Structure:** Uses a 2D array (`a[2][65]`) to store account IDs and corresponding passwords.
- **Control Structures:** Utilizes loops (`for` and `while`) for repetitive tasks and a `switch` statement for menu-driven functionality.
- **User Input Handling:** Uses `scanf` for input from users and displays appropriate messages based on input validation and verification.

### Purpose:

The project aims to provide students with a secure and accessible way to manage their accounts using a robust authentication system. It focuses on simplicity and functionality, making it suitable for educational purposes and as a foundation for more complex systems.

**Future Enhancements:**

- **Encryption:** Implement password encryption to enhance security.
- **User Interface Improvements:** Develop a graphical user interface (GUI) for easier navigation and interaction.
- **Database Integration:** Integrate with a database for scalable storage and management of user accounts and credentials.

This project serves as a fundamental introduction to account management systems, demonstrating key concepts in programming, user authentication, and data handling in C.