Mini Bank System Project (Version 2.0)

You are required to add the following requirements to the existing mini bank system :

🔒 1. Password Protection for Accounts

- During account creation, ask users to set a password.

- Validate password during login along with National ID.

- Passwords should be masked while typing (Console.ReadKey() with asterisks).

- Save password hashed .

📊 2. Monthly Statement Generator

- Users can request a monthly statement.

- Show all transactions within a selected month/year.

- Save the statement to a separate file named: Statement_Acc12345_2025-07.txt

🔄 3. Update Account Info

- Allow users to update their phone number or address.

- Ensure changes persist in the saved file.

📉 4. Loan Request Feature

- Users can request a loan.

- Set criteria: e.g., only if balance ≥ 5000 and no active loan.

- Store loan amount and interest rate.

- Allow admin to approve/reject requests.

- Approved loans get added to account balance; rejected loans are discarded.

⏳ 5. Transaction Timestamping & Filtering

- Every transaction should be timestamped.

- Add filtering: "Show my last N transactions" or "Transactions after date X".

🔐 6. Admin Authentication

- Require admin login using a fixed admin ID & password.
- Prevent unauthorized access to admin menu.

💬 7. User Feedback System

- After any transaction, allow users to rate service from 1 to 5.
- Store ratings in a list and allow admin to view average feedback score.

🔃 8. Data Backup System

- Upon exiting the application, prompt to save a backup of all data.
- Backup files should be named with timestamp: Backup_2025-07-01_0930.txt

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📑 9. Print All Transactions of a User

- Let admin or user view **all** past transactions from a loaded file.
- Print in formatted style with date, type, amount, balance after transaction.

🖼️ 10. Appointment Booking for Bank Services (Creative Add-on)

- Let users book an appointment for services like loan discussion, account consultation.
- Store appointments in a queue with date/time.
- Prevent booking if user already has an appointment.

💵 11. Currency Converter Before Deposit

- Let users choose to deposit in other currencies (USD, EUR).
- Convert to local currency using a fixed exchange rate (e.g., 1 USD = 3.8 OMR).
- Store original amount and converted amount in transaction record.

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12. Lock Account After 3 Failed Logins

- If a user enters the wrong password 3 times, their account is locked (set a flag in their record).
- A locked account cannot log in unless unlocked by admin (through admin menu).

⚙️ 13 Optional Advanced Bonus Tasks (Use LINQ for sorting, searching, filtering)