

Project Title:

Mini ATM Simulation

Problem Statement:

Design a menu-driven ATM simulation program in Java that allows a user to perform basic banking operations. The program should:

- Accept a PIN from the user and allow a maximum of 3 attempts.
 - Display a menu after successful authentication: Check Balance, Deposit Money, Withdraw Money, Quit.
 - Validate deposits (must be positive) and withdrawals (cannot exceed balance).
 - Repeat the menu until the user chooses to quit.
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Algorithm:

1. Initialize account balance and correct PIN(correct PIN :1234).
 2. Allow the user to enter PIN. Limit attempts to 3.
 3. If PIN is correct, display menu using a do-while loop:
 - Check Balance
 - Deposit Money
 - Withdraw Money
 - Quit
 4. For deposits, add amount to balance if positive.
 5. For withdrawals, subtract amount from balance only if $(balance - withdraw) \geq 1000$.
 6. Repeat menu until the user chooses to quit.
 7. Exit program with a goodbye message.
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Sample Input / Output:

===== Welcome to Mini ATM =====

Enter your PIN: 1111

Incorrect PIN! Attempts left: 2

Enter your PIN: 1234

PIN correct! Access granted.

===== ATM Menu =====

1) Check Balance

2) Deposit Money

3) Withdraw Money

Q) Quit

Enter your choice: 1

Current Balance: 1000.0

===== ATM Menu =====

1) Check Balance

2) Deposit Money

3) Withdraw Money

Q) Quit

Enter your choice: 2

Enter amount to deposit: 500

Deposit successful! New Balance: 1500.0

===== ATM Menu =====

1) Check Balance

2) Deposit Money

3) Withdraw Money

Q) Quit

Enter your choice: 3

Enter amount to withdraw: 200

Withdrawal successful! New Balance: 1300.0

===== ATM Menu =====

1) Check Balance

2) Deposit Money

3) Withdraw Money

Q) Quit

Enter your choice: Q

Thank you for using Mini ATM. Goodbye!