ATM Project

Algorithm

1. **Start Algorithm**
2. **Display Welcome Screen**
3. **Allow user to slide card**
    a. Simulate card sliding by asking user to enter account number
        i. Check account number against valid account numbers
            – If number is invalid allow three attempts then print error message – Please contact your financial institution
            – If number is valid proceed to Step 4.
4. **Allow user to enter personal identification number (PIN)**
    a. Simulate by asking user to enter account number
        i. Check PIN against valid PINs.
            – If number is invalid allow three attempts then print error message – Please contact your financial institution
            – If number is valid proceed to Step 5.
5. **Display the main menu**
    a. Balance Inquiry
    b. Fast Cash
    c. Withdrawal
    d. Deposit
    e. Quit
6. **Allow user to choose from menu** – Assume MyATM is an object.
    a. If **choice = a** proceed to the method to get the balance (i.e. MyATM.getBalance()) .
    b. If **choice = b** proceed to the method to get the fast cash (i.e. MyATM.getFastCash()) .
    c. If **choice = c** proceed to the method to withdraw cash (i.e. MyATM.getWithdrawal()) .

i. Ask user for amount of withdrawal
ii. If the balance > withdrawal amount proceed with transaction
   - Subtract withdrawal.
   - Update balance.
iii. If the balance < withdrawal announce insufficient funds and end transaction
iv. If the balance = withdrawal amount display warning message about balance and end transaction

d. If **choice = d** proceed to the method to accept the deposit (i.e. MyATM.getDeposit())
   i. Ask user for amount of deposit
   ii. Update balance
e. If **choice = e** proceed to the method to end the transaction(i.e. MyATM.endTranaction())
   i. Print receipt if requested
   ii. Print Thank You message to customer

7. Stop Algorithm

Test Data

Valid Account Numbers
int [] AcctNum = { 1234, 2341, 3412, 4123}

Valid PINS
int [] PIN = {234, 341, 412, 123}

Beginning Balances
int [] InitBal = {1000, 2000, 300, 0}