Reidfinal Algorithm:

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I.   Initialize Bank, BankUtility, CoinCollector classes as well as the menu
II.  Print the menu
III. Ask user which option they would like to choose
     A. Open an account
        1. Calls the addAccountToBank method from the Bank class
           a)  Calls the BankUtility Class's promptUserForString
               (1) Generate the first and last name variables
           b) Calls the BankUtility class's random generator
               (1) Generates PIN using min and max variables set in Bank
           c) Calls the BankUtility class's random generator
               (1) Generates an account number using min and max variables in Bank
           d) Prompts for social security number
               (1) Verifies 9 digits
               (2) Inserts dashes in number
           e) Creates an Account instance and sets all variables
           f) Calls method to add Account instance to the accounts array
               (1) If the array has not hit its max
                   (a) Add Account instance to the array
           g) If successful
               (1) Return account number and PIN
        2. Display account number and PIN to user
        3. Return to menu
     B. Get account information and balance
        1. Prompt user for account number and PIN
           a) Return Account instance and PIN verification
        2. Call Account class's toString method for the verified instance
           a) Return account details saved in class instance
        3. Print account details for user
        4. Return to menu
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C.  Change PIN
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user for new PIN
        a)  If PIN numbers match
            (1)  Set new PIN in the Account instance
    3.  Return to menu
D.  Deposit money in account
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user for the amount to deposit
        a)  If number is valid
            (1)  Prompt for confirmation
                (a)  Use Account class’s deposit method
                    i)   Return new balance
    3.  Print balance for user
    4.  Return to menu
E.  Transfer money between accounts
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user for second account number
        a)  Verify second account
    3.  Prompt user for amount to transfer
        a)  If number is valid
            (1)  Prompt for confirmation
                (a)  Use Account class’s withdraw method to withdraw from account
                    i)   Return new balance
                (b)  Use Account class’s deposit method to deposit to second account
                    i)   Return new balance
    4.  Print balances for first and second accounts
    5.  Return to menu
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F.  Withdraw money from account
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user for the amount to withdraw
        a)  If number is valid
            (1)  Prompt for confirmation
                (a)  Use Account class's withdraw method
                    i)  Return new balance
    3.  Print balance for user
    4.  Return to menu
G.  ATM withdrawal
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user for amount to withdraw
        a)  Verify amount is a positive number, multiple of five, and less than $1000
            (1)  Prompt for confirmation
                (a)  Use Account class's withdraw method
                    i)  Return new balance
    3.  Print balance for user
    4.  Return to menu
H.  Deposit change
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Prompt user to "deposit" coins
        a)  Call CoinCollector class's method for parsing coin collection
            (1)  Match user's input to variables set for "P", "N", "D", "Q", "H", or "W"
            (2)  Reject all other values
            (3)  Return a total amount of "coins" counted
        b)  Use Account class's deposit method
            (1)  Return new balance
    3.  Print balance for user
    4.  Return to menu
I.  Close account
    1.  Prompt user for account number and PIN
        a)  Return Account instance and PIN verification
    2.  Call Bank class’s removeAccountFromBank method
        a)  Remove Account instance from the accounts array replacing with None
            (1)  Return confirmation
    3.  Print confirmation of account closure
    4.  Return to menu
J.  Add monthly interest to all accounts
    1.  Prompt user for APY
        a)  Verify number
        b)  Call Bank class’s addMonthlyInterest method
            (1)  Iterate through accounts in the accounts array
                (a)  For each account
                    i)    Calculate percent based on given value
                    ii)   Deposit calculated percentage into the account
                    iii)  Print Calculated value
                    iv)   Print new balance
    2.  Return to menu
K.  End Program
    1.  Exits the program
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