PROJECT DOCUMENATION

Instructions:

1.Setup Your Project:

- Open your IDE and create a new project named SimpleBankingSystem.
- Design the BankAccount Class:
- Define a class BankAccount with private attributes for account holder's name, account number, and balance.
- Implement the following public methods:
  - deposit method to add money to the balance.
  - withdraw method to subtract money from the balance if sufficient funds are available.
  - getBalance method to return the current balance.
  - displayAccountInfo method to show account details.

Instructions:

Implement the Banking Interface:

- Create a simple text-based user interface in the main function.
- Provide menu options for:
- Creating a new account.
- Depositing money.
- Withdrawing money.
- Checking balance.
- Displaying account information.
- Testing Your System:
- Test each method in the BankAccount class thoroughly.
- Check how the system handles invalid inputs like withdrawing more than the balance or entering incorrect .

Challenges Faced and Their Solutions

Managing Multiple Accounts:

- **Challenge:** Keeping track of multiple accounts and allowing operations on specific accounts.
- **Solution:** Use a vector to store BankAccount objects. Each account can be accessed by its account number.

Handling Invalid Inputs:

- **Challenge:** Ensuring that inputs like negative amounts for deposits and withdrawals are handled properly.
- **Solution:** Add validation checks in the deposit and withdraw methods to ensure the amount is positive and within valid limits.

Challenges Faced and Their Solutions

1. **User Interface Navigation:**
   - **Challenge:** Creating an intuitive text-based interface for users to interact with the system.
   - Solution: Use a menu-driven interface with clear instructions for each option, and handle user inputs appropriately.
2. **Error Handling:**
   - Challenge: Handling errors gracefully, such as invalid account numbers or non-numeric input.
   - Solution: Add error messages and checks to guide the user to correct inputs, ensuring the program does not crash.
3. **Displaying Account Information:**
   - Challenge: Providing a clear and concise way to display account details.
   - Solution: Implement the displayAccountInfo method to show all relevant account details in a formatted manner.

LinkedIn Post Link:
https://www.linkedin.com/feed/update/urn:li:activity:7214011679758553090/

GitHub Post Link:
https://github.com/Arubakhan 22/Handling-Data-Types-and-Variables