Task: Basic Banking System

Problem Statement:

Create a basic console-based banking system that allows users to manage their accounts through simple transactions like deposits, withdrawals, and balance inquiries.

Solution Overview:

To address the problem, we developed a Python script that simulates a basic banking system with menu-driven functionalities for depositing money, withdrawing money, checking balance, and exiting the program. The script initializes account balances, validates user inputs, and provides appropriate success or error messages to guide users through the system.

Challenges and Resolutions:

1. **Input Validation:** Ensuring user inputs are numeric and handling non-numeric entries:

    - **Resolution:** Implemented try-except blocks to catch Value Error and provide error messages for better user interaction.

2. **Menu Navigation Logic:** Implementing a loop for continuous interaction and user control:

    - **Resolution:** Utilized a while loop to display the menu options repeatedly until the user chooses to exit the program.

3. **Balance Validation:** Checking for sufficient funds before allowing withdrawals:

    - **Resolution:** Added conditional checks to validate withdrawal amounts against the current account balance to prevent overdrawing.

Instructions for Setting Up and Using the Banking System:

1. **Setting Up:**

    - Download the provided Python script and save it to a local directory.

    - Ensure Python is installed on your system (Python 3 recommended).

2. **Execution:**

    - Open a terminal or command prompt.

    - Navigate to the directory where the script is saved.

3. **Running the Program:**

    - Execute the script by running the command:

    ```
    python basic_banking_system.py
    ```

    - If using Python 3, run:

    ```
    python3 basic_banking_system.py
    ```

4. **Using the Banking System:**

    Follow the on-screen menu to perform actions:

- Deposit Money

- Withdraw Money

- Check Balance

- Exit the Program

5. **Input Validation:**

    - Ensure to input valid numerical values when prompted for deposits or withdrawals.

    - Non-numeric inputs will trigger error messages.

6. **Exiting the Program:**

    - You can exit the program by selecting the corresponding option in the menu.