

**Write a MATLAB program that simulates an ATM menu with the following options:**

1. **Deposit** – Ask the user for an amount and add it to the account balance.
2. **Withdraw** – Ask the user for an amount and deduct it from the balance **only if sufficient funds are available**.
3. **Balance Inquiry** – Display the current balance.
4. **Exit** – Terminate the program with a thank you message.

**Instructions :**

1. **Initialize** a variable balance with a starting value (e.g., 1000).
2. Use a while true loop to **continuously display the menu** and allow the user to perform operations.
3. Use a switch-case structure to handle the user's selection.
4. **Validate user inputs:**
  - Amounts for deposit and withdrawal should be positive.
  - Withdrawals should not exceed the available balance.
5. When the user selects option 4 (Exit), **exit the loop** and display a farewell message.
6. Format your output using fprintf() for a cleaner display.