Electronic Voting Machine (EVM)

This is a simple Java-based console application that simulates an Electronic Voting Machine (EVM) for a parliamentary election. The program allows users to cast votes for a list of candidates, view the election results, and exit the system.

Features

1. **Main Menu Options**

   o **Vote**: Cast a vote for one of the listed candidates or NOTA (None of the Above).

   o **Calculate Result**: View the voting results after verifying with a captcha for added security.

   o **Exit**: End the voting session and exit the program.

2. **Voting Process**

   o Displays a list of five candidates and an option for NOTA.

   o Users can cast their vote by entering the number corresponding to their chosen candidate.

   o A confirmation message is displayed after a successful vote.

   o Users can return to the main menu without casting a vote.

3. **Secure Results Display with Captcha**

   o Before displaying the results, the program generates a 6-digit random captcha.

   o Users must enter the captcha correctly to access the election results.

   o If the captcha is incorrect, the system returns to the main menu with an error message.

4. **Error Handling**

   o The system checks for valid inputs at each step and displays appropriate error messages for invalid selections.

Requirements

- **Java Runtime Environment** (JRE) installed.

- **Java Development Kit** (JDK) if running from source.

How to Use

1. **Run the Program**

   o Compile and run the program in a Java IDE or from the command line.

2. **Main Menu**

   o When the program starts, you'll see the main menu:

     ▪ Enter 1 to cast a vote.

     ▪ Enter 2 to view the results (requires captcha verification).

     ▪ Enter 3 to exit the program.

3. **Voting**

   o Select 1 to vote and view the list of candidates.

   o Enter the number corresponding to your candidate (1-5) or choose 6 for NOTA.

   o After voting, you'll receive a confirmation and can choose to return to the main menu.

4. **Calculate Result**

   o Select 2 to calculate and display the election results.

   o A 6-digit captcha will be shown; enter it correctly to view the results.

   o If the captcha is incorrect, you'll be returned to the main menu.

5. **Exit**

   o Select 3 to safely exit the program.

Example Output

 Parliament Election 24-25

Enter choice :

1. Vote

2. Calculate Result

3. Exit

- Following the prompts, you can interact with the system to cast votes, check results, and exit as needed.

Notes

- The program currently supports only integer input for choices and votes.

- Votes can only be cast once per session for each candidate.

- Results are calculated and displayed after successful captcha verification for added security.