**Mini Voting System**

The Mini Voting System is a simple command-line program that allows voters to cast their votes for different parties participating in an election. It provides options for casting votes, finding the leading candidate, and exiting the program.

Program Flow :

1. The program starts by displaying the message "Welcome to the Polling Booth."

2. The user is prompted to enter their first name.

3. The user is prompted to enter their age.

4. The program checks if the age entered is greater than or equal to 18.

- If the age is less than 18, the program displays a message stating that the user is not eligible to vote and exits.

- If the age is 18 or above, the program continues.

5. The user is prompted to enter their 4-digit ID number.

6. The program checks if the ID number is valid (4 digits).

- If the ID number is invalid, the program displays a message stating that the ID number is invalid and exits.

- If the ID number is valid, the program continues.

7. The program checks if the voter ID belongs to the booth by reading a file containing valid voter IDs.

- If the voter ID does not belong to the booth, the program displays a message stating that the voter does not belong to the booth and exits.

- If the voter ID belongs to the booth, the program continues.

8. The program displays a message stating that the user is eligible to vote.

9. The program displays the list of parties participating in the election.

10. The user is prompted to choose an option (1-3).

11. Depending on the chosen option:

- If the option is 1, the user is prompted to enter their party choice.

- The program checks if the voter has already voted by reading a file containing vote details.

- If the voter has already voted, the program displays a message stating that the user has already voted.

- If the voter has not voted, the program writes the vote details to a file and displays the chosen party.

- If the option is 2, the program reads a file containing vote details and counts the votes for each party.

- The program finds the leading party based on the vote counts and displays the leading party.

- If the option is 3, the program displays a message stating "Exit" and exits.

- If an invalid option is chosen, the program displays a message stating that the option is invalid.

12. The program flow continues from step 10 until the user chooses to exit.

Files Used :

The program uses the following files:

- `voter\_ids.txt`: Contains a list of valid voter IDs for the booth.

- `voting\_details.txt`: Stores the details of the votes cast by the voters.

Conclusion :

To run the program, compile the source code but here we have Makefile, so compile it and execute the output file.

Upon running the program, follow the instructions prompted on the console to navigate through the different options and functionalities provided by the Polling Booth System.

Note: The program assumes that the `voter\_ids.txt` and `voting\_details.txt` files exist in the same directory as the program executable. If the files are not present, the program may display error messages or behave unexpectedly.