

CLEAN START TEST

Follow these steps to verify that the system works correctly from a fresh start.

1. Delete Existing Data

- Remove **all .txt files** from the program directory
(*voters.txt, candidates.txt, blockchain.txt, etc.*)
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2. Launch the Program

Start the application with a clean environment.

3. Add Candidates

Enter the following candidate names:

- Alice
 - Bob
 - Charlie
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4. Register Voters

Register the following voter IDs:

- 201, 202, 203, 204, 205
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5. Cast Votes

Record votes using the voter IDs:

Voter ID	Vote For
201	Alice
202	Alice
203	Bob
204	Charlie
205	Alice

6. Display Results

Expected Output:

- Alice: **3**
 - Bob: **1**
 - Charlie: **1**
 - ✓ *Correct vote count*
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7. Verify Blockchain

Expected Output:

“All 5 blocks valid”

✓ *No tampering detected*

8. Exit the Program

Close the application normally.

9. Restart the Program

Open the application again to check persistence from blockchain reconstruction.

10. Display Results Immediately

Expected Output:

- Alice: 3
 - Bob: 1
 - Charlie: 1
 - ✓ (*Values correctly recalculated from blockchain*)
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11. Attempt Re-Voting

Try voting again with voter **201**.

Expected Output:

- “**You have already voted**”
✓ *Double-voting is blocked*
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12. Search for Block #3

Use the block-search feature to look up **block 3**.

Expected Output:

- Displays the stored details of **Block #2**
✓ *Correct linked-chain behavior*
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13. Export Blockchain

Use the export option.

Expected Result:

- Creates a file named **blockchain_export.txt**
✓ *Blockchain exported successfully*