

# 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.

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## 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 |
|-----|-------|

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## 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*

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## 8. Exit the Program

Close the application normally.

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## 9. Restart the Program

Open the application again to check persistence from blockchain reconstruction.

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## 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*