| **Project Name: Project 1: Voting System Team#08** | |
| --- | --- |
| **Test Stage: Unit \_x\_ System \_ \_** | **Test Date: 3/23/2023** |
| **Test Case ID#: CPLElection\_14** | **Name(s) of Testers: Dheva Subramaniam** |
| **Test Description:**   * Testing the ReadElection method using the WriteResultsToFile method * This test uses the CPLElectionTest\_Single.csv file, which contains an election with one party that only contains one candidate and one ballot |  |
| **Automated: yes\_x\_ no \_\_\_ using Google Test** |  |
| **Results: Pass \_\_\_\_x\_\_\_ Fail\_\_\_\_\_\_\_\_** |  |
|  |  |
| **Preconditions for Test:**  CPLElectionTest\_Single.csv must be in the same directory as the testing executable | |

| **Step**  **#** | **Test Step**  **Description** | **Test**  **Data** | **Expected**  **Result** | **Actual**  **Result** | **Notes** |
| --- | --- | --- | --- | --- | --- |
| 1 | Opens CPLElectionTest\_Single.csv | CPLElectionTest\_Single.csv | ifstream object | ifstream object | N/A |
| 2 | Call ignore() on istream object with inputs 256 and ‘\n’ | int 256, char ‘\n’ | N/A | N/A | First line is being skipped as it is already known what type of election is being read |
| 3 | Create CPLElection object | istream generated by step 2, date string: “05142001” | CPLElection object | CPLElection object | N/A |
| 4 | Call RunElection method on CPLElection object | CPLElection object from step3 | N/A | N/A | CPLElection’s private members should only be interacted with bypublic methods and so do not result in any direct output |
| 5 | Check that CPLElectionTest\_Single.csv is closed using is\_open() | istream object | false | false | N/A |
| 6 | Run the WriteResultsToFile | CPLElection object from step 3 | 05142001CPL.txt file | 05142001CPL.txt file | File generated from auditFiler |
| 7 | Open 05142001CPL.txt | 05142001CPL.txt | ifstream object | ifstream object | N/A |
| 8 | Read contents | ifstream object | See below Post Conditions | See below Post Conditions | Contents are compared using Google Test |

**Post condition(s) for Test:**

05142001CPL.txt file containing auditor information

Expected results for step 8:

CPLElection

Number of Parties: 1

PartyA: A

Number of seats: 1

Number of ballots: 1

Ballot ID: 1 Ballot Info: 1

Counting ballots:

Party "PartyA" received ballot number 1

Quota determined to be: 1

Party "PartyA" | Seats assigned using quota: 1

Candidates receiving seats:"

PartyA: A

Actual Result for step 8:

CPLElection

Number of Parties: 1

PartyA: A

Number of seats: 1

Number of ballots: 1

Ballot ID: 1 Ballot Info: 1

Counting ballots:

Party "PartyA" received ballot number 1

Quota determined to be: 1

Party "PartyA" | Seats assigned using quota: 1

Candidates receiving seats:

PartyA: A