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| **Project Name: Project 1: CompuVote Team #19** | |
| **Test Stage:** Unit | **Test Date:** 03/14/2021 |
| **Test Case ID #:** test\_396\_07\_eliminateLowest\_01\_testEliminateLowest | **Name(s) of Testers:** Aaron Kandikatla, Jack Fornaro |
| **Test Description:**  Given a standard IR election with candidates, parties, and ballots, tests that when a candidate is eliminated, their ballots are properly distributed |  |
| **Automated:** Yes | **Indicate where you are storing the tests (what file) and the name of the method/functions being used:**  Test file: Project1/src/test/org/team19/InstantRunoffSystemTest.java  Test method: testEliminateLowest  Method/constructor being tested: eliminateLowest from Project1/src/main/org/team19/InstantRunoffSystem.java |
| **Results:** Pass |  |
|  |  |
| **Preconditions for Test:**  N/A | |

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| **Step**  **#** | **Test Step**  **Description** | **Test**  **Data** | **Expected**  **Result** | **Actual**  **Result** | **Notes** |
|  |  |  |  |  |  |
| 1 | Tests to check if eliminated candidate (Kleinberg) is still in the candidateBallotsMap | **Ballots:**  B1 = [Rosen, Royce, Kleinberg, Chou]  B2 = [Rosen, Chou]  B3 = [Rosen, Kleinberg, Chou]  B4 = [Chou, Kleinberg, Rosen, Royce]  B5 = [Chou, Royce]  B6 = [Royce]  **Candidates:**  Rosen (D): 3  B1, B2, B3  Kleinberg (R): 0  Chou (I): 2  B4, B5  Royce (L): 1  B6  Eliminate Kleniger | false | false | N/A |
| 2 | Test to check that the other candidates’ ballot counts are unchanged because the eliminated candidates had no ballots to redistribute or had only one ballot where the next candidate is not indicated | **Ballots:**  B1 = [Rosen, Royce, Kleinberg, Chou]  B2 = [Rosen, Chou]  B3 = [Rosen, Kleinberg, Chou]  B4 = [Chou, Kleinberg, Rosen, Royce]  B5 = [Chou, Royce]  B6 = [Royce]  **Candidates:**  Rosen (D): 3  B1, B2, B3  Chou (I): 2  B4, B5  Royce (L) : 1  B6  Eliminate Kleniger  Ballot to distribute: None  Eliminate Royce  Ballot to distribute: B6 | [3, 2, 1] | [3, 2, 1] | N/A |
| 3 | Test to check that Chou’s ballot B5 is not distributed because Royce has already been eliminated and ballot B4 is distributed to Rosen since Kleinberg is already eliminated | **Ballots:**  B1 = [Rosen, Royce, Kleinberg, Chou]  B2 = [Rosen, Chou]  B3 = [Rosen, Kleinberg, Chou]  B4 = [Chou, Kleinberg, Rosen, Royce]  B5 = [Chou, Royce]  B6 = [Royce]  **Candidates:**  Rosen (D): 3  B1, B2, B3  Chou (I): 2  B4, B5  Eliminate Chou  Ballot to distribute: B4 and B5 | [4] | [4] | N/A |

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

N/A