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| **Project Name: Aegis Project 1: Voting System Team#7** | |
| **Test Stage: Unit X System \_** | **Test Date:** 3/26/21 |
| **Test Case ID#:** OPLTest\_9: allocateSeatsNoRemainder | **Name(s) of Testers:** Michael, Donald, Grant, Lucky |
| **Test Description:**  Verifies that allocateSeats() distributes the correct amount of seats to each party. This test ensures that the program can handle a scenario where the seats are evenly distributed amongst the parties without having any remainders. |  |
| **Automated: yes X no \_\_\_** | **Indicate where you are storing the tests (what file) and the name of the method/functions being used.**  Stored in file: OPLTest.cpp  Method names:   * allocateSeats() * setNumSeats() * setQuota() * getPartyMembers() * getParties() * addBallot() |
| **Results: Pass \_\_X\_\_\_** Fail **\_\_\_\_\_\_\_\_** |  |
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| **Preconditions for Test:**  Election data has been set up properly. | |

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| **Step**  **#** | **Test Step**  **Description** | **Test**  **Data** | **Expected**  **Result** | **Actual**  **Result** | **Notes** |
|  |  |  |  |  |  |
| 1 | Add more ballots to each Party to ensure that each party receives an equal number of votes. There is no remainder. | opl->numSeats  opl->parties  opl->quota | partiesOriginal.at(0).getSeatsWon() = 1 partiesOriginal.at(1).getSeatsWon() = 1 partiesOriginal.at(2).getSeatsWon() = 1  (partiesOriginal.at(0).getRemainder() = 0  (partiesOriginal.at(0).getRemainder() = 0  (partiesOriginal.at(0).getRemainder() = 0 | partiesOriginal.at(0).getSeatsWon() = 1 partiesOriginal.at(1).getSeatsWon() = 1 partiesOriginal.at(2).getSeatsWon() = 1  (partiesOriginal.at(0).getRemainder() = 0  (partiesOriginal.at(0).getRemainder() = 0  (partiesOriginal.at(0).getRemainder() = 0 | Party D, R, and I each have 1 seat. |
|  | Change the quota and number of total seats accordingly |  |  |  |  |
| 2 | Call opl->allocateSeats() |  |  |  |  |
| 3 | Verify that each party has 1 seat and they have a remainder of 0. |  |  |  |  |

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

Each party has received their 1 seat. There is no remainder.