

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The parse function parses all input streams for the number of ballots and the ballots themselves
Test Description	Test that importing ballot headers from multiple sources for <code>InstantRunoffSystem</code> results in the total number of ballots being their sum
Test ID	test_437_07_importBallotsHeader_05_testMultipleImports
Team Member(s) Responsible	Nikunj Chawla
Inputs	1. Calls to <code>importBallotsHeader</code> with 2, 0, and 6 ballots (as part of one test)
Tests	1. Test that <code>importBallotsHeader</code> sums the ballot counts provided for each call
Outputs	1. None of the aforementioned calls to <code>importBallotsHeader</code> result in an exception being thrown and that <code>numBallots</code> is 8 after the calls
Result (Pass or Fail)	Pass
Date	4/21/21

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The parse function parses all input streams for the number of ballots and the ballots themselves
Test Description	Test that importing ballot headers from multiple sources for <code>OpenPartyListSystem</code> results in the total number of ballots being their sum

Test ID	test_438_09_importBallotsHeader_07_testMultipleImports
Team Member(s) Responsible	Nikunj Chawla
Inputs	1. Calls to <code>importBallotsHeader</code> with 2 ballots and 4 seats, 0 ballots and 3 seats, and 6 ballots and 5 seats (as part of one test)
Tests	1. Test that <code>importBallotsHeader</code> sums the ballot counts provided for each call and uses the last number of seats provided
Outputs	2. None of the aforementioned calls to <code>importBallotsHeader</code> result in an exception being thrown, <code>numBallots</code> is 8 after the calls, and <code>numSeats</code> is 5 after the calls
Result (Pass or Fail)	Pass
Date	4/21/21

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The parse function parses all input streams for the number of ballots and the ballots themselves
Test Description	Test that parsing multiple files for <code>InstantRunoffSystem</code> with varying numbers of ballots per file works
Test ID	test_439_06_parse_09_testParseMultipleIrFiles
Team Member(s) Responsible	Aaron Kandikatla
Inputs	1. Calls the <code>parse</code> method in <code>VotingStreamParser</code> with 3 IR csv files as input. 2. <code>ir_multi_part_1.csv</code> : 2 ballots, <code>ir_multi_part_2.csv</code> : 4 ballots, <code>ir_multi_part_3.csv</code> : 3 ballots
Tests	1. Test that after <code>parse</code> is called, the number of candidates is correctly parsed 2. Tests that the candidates themselves are correctly parsed 3. Tests that ballots from 3 different files are added up

	4. Tests that all candidates' ballots are parsed and distributed properly
Outputs	<ol style="list-style-type: none"> 1. The call to parse does not throw any exception 2. getNumCandidates equals 4 3. getCandidates equals Rosen (D),Kleinberg (R),Chou (I),Royce (L) 4. getNumBallots equals 9 5. The candidates receive the following number of ballots: Rosen - 4, Kleinberg - 2, Chou - 1, Royce - 2
Result (Pass or Fail)	Pass
Date	4/24/21

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The parse function parses all input streams for the number of ballots and the ballots themselves
Test Description	Test that parsing multiple files for <code>OpenPartyListSystem</code> with varying numbers of ballots per file works
Test ID	test_440_06_parse_10_testParseMultipleOplFiles
Team Member(s) Responsible	Aaron Kandikatla
Inputs	<ol style="list-style-type: none"> 1. Calls the <code>parse</code> method in <code>VotingStreamParser</code> with 3 OPL csv files as input. 2. <code>opl_multi_part_1.csv</code>: 1 ballot, <code>opl_multi_part_2.csv</code>: 5 ballots, <code>opl_multi_part_3.csv</code>: 3 ballots
Tests	<ol style="list-style-type: none"> 1. Test that after <code>parse</code> is called, the number of candidates is correctly parsed 2. Tests that the candidates themselves are correctly parsed 3. Tests that ballots from 3 different files are added up 4. Tests that the number of seats are correctly parsed 5. Tests that all parties' ballots are parsed and assigned properly
Outputs	<ol style="list-style-type: none"> 1. The call to parse does not throw any exception 2. getNumCandidates equals 6

	<ol style="list-style-type: none"> 3. getCandidates equals [Pike,D],[Foster,D],[Deutsch,R],[Borg,R],[Jones,R],[Smith,I] 4. getNumBallots equals 9 5. getNumSeats equals 3 6. The parties receive the following number of ballots: R - 3, D - 5, I - 1
Result (Pass or Fail)	Pass
Date	4/24/21

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The <code>main</code> method can accept multiple files as input and produce accurate audit and report files.
Test Description	Test that running the election on multiple files for <code>InstantRunoffSystem</code> with varying numbers of ballots per file works
Test ID	test_441_05_main_18_testIrMultipleFiles
Team Member(s) Responsible	Aaron Kandikatla
Inputs	<ol style="list-style-type: none"> 1. Calls the <code>main</code> method in <code>VotingSystemRunner</code> with 3 IR csv files as input. 2. <code>ir_multi_part_1.csv</code>: 2 ballots, <code>ir_multi_part_2.csv</code>: 4 ballots, <code>ir_multi_part_3.csv</code>: 3 ballots
Tests	<ol style="list-style-type: none"> 1. Test that after <code>main</code> is called, the generated audit and report files match the expected audit and report files exactly
Outputs	<ol style="list-style-type: none"> 1. <code>test_ir_multiple_files_audit_actual.txt</code> matches <code>test_ir_multiple_files_audit_expected.txt</code> 2. <code>test_ir_multiple_files_report_actual.txt</code> matches <code>test_ir_multiple_files_report_expected.txt</code>
Result (Pass or Fail)	Pass
Date	4/24/21

PBI #	4
PBI Description	As an election official, I would like to bring in ballots from multiple balloting locations to run the election so that all ballots for an election are processed together from different polling locations.
Task Description	The <code>main</code> method can accept multiple files as input and produce accurate audit and report files.
Test Description	Test that running the election on multiple files for <code>OpenPartyListSystem</code> with varying numbers of ballots per file works
Test ID	test_441_05_main_19_testOplMultipleFiles
Team Member(s) Responsible	Aaron Kandikatla
Inputs	<ol style="list-style-type: none"> 1. Calls the <code>main</code> method in <code>VotingSystemRunner</code> with 3 OPL csv files as input. 2. <code>opl_multi_part_1.csv</code>: 1 ballot, <code>opl_multi_part_2.csv</code>: 5 ballots, <code>opl_multi_part_3.csv</code>: 3 ballots
Tests	<ol style="list-style-type: none"> 1. Test that after <code>main</code> is called, the generated audit and report files match the expected audit and report files exactly
Outputs	<ol style="list-style-type: none"> 1. <code>test_opl_multiple_files_audit_actual.txt</code> matches <code>test_opl_multiple_files_audit_expected.txt</code> 2. <code>test_opl_multiple_files_report_actual.txt</code> matches <code>test_opl_multiple_files_report_expected.txt</code>
Result (Pass or Fail)	Pass
Date	4/24/21

PBI #	6
PBI Description	As an election official, I want the IR election system to invalidate ballots that do not rank at least half of the candidates so that the requirement by state election officials is met.
Task Description	Create new tests for the <code>addBallot</code> function that takes into consideration the invalidation of ballots and create their respective log files

Test Description	Test that the invalidation of ballots works properly for an odd number of candidates
Test ID	test_443_07_addBallots_10_testAddBallotInvalidationOdd
Team Member(s) Responsible	Nikunj Chawla
Inputs	<ol style="list-style-type: none"> 1. The number corresponding to the current ballot 2. The string corresponding to a ballot line 3. The identifier associated with the current input source 4. The line number associated with the current ballot line being read
Tests	<ol style="list-style-type: none"> 1. Test that a ballot that is correct in format and ranks all of the candidates is added 2. Test that a ballot that is correct in format but ranks much less than half of the candidates is not added 3. Test that a ballot that is correct in format but ranks the number just over half the number of candidates is added 4. Test that a ballot that is correct in format but ranks the number just under half the number of candidates is not added
Outputs	<ol style="list-style-type: none"> 1. The aforementioned ballots when used with <code>addBallot</code> do not throw exceptions, and only the ballots that rank equal to or over half of the ballots are added
Result (Pass or Fail)	Pass
Date	4/25/21

PBI #	6
PBI Description	As an election official, I want the IR election system to invalidate ballots that do not rank at least half of the candidates so that the requirement by state election officials is met.
Task Description	Create new tests for the <code>addBallot</code> function that takes into consideration the invalidation of ballots and create their respective log files
Test Description	Test that the invalidation of ballots works properly for an even number of candidates
Test ID	test_444_07_addBallots_11_testAddBallotInvalidationEven

Team Member(s) Responsible	Nikunj Chawla
Inputs	<ol style="list-style-type: none"> 1. The number corresponding to the current ballot 2. The string corresponding to a ballot line 3. The identifier associated with the current input source 4. The line number associated with the current ballot line being read
Tests	<ol style="list-style-type: none"> 1. Test that a ballot that is correct in format and ranks all of the candidates is added 2. Test that a ballot that is correct in format but ranks the number just under half the number of candidates is not added 3. Test that a ballot that is correct in format but ranks the number just over half the number of candidates is added 4. Test that a ballot that is correct in format but ranks the number equal to half the number of candidates is added
Outputs	<ol style="list-style-type: none"> 1. The aforementioned ballots when used with <code>addBallot</code> do not throw exceptions, and only the ballots that rank equal to or over half of the ballots are added
Result (Pass or Fail)	Pass
Date	4/25/21

PBI #	6
PBI Description	As an election official, I want the IR election system to invalidate ballots that do not rank at least half of the candidates so that the requirement by state election officials is met.
Task Description	Create new tests for the <code>addBallot</code> function that takes into consideration the invalidation of ballots and create their respective log files
Test Description	Tests that <code>compuVote</code> invalidates the correct ballots and outputs the expected audit and report files
Test ID	test_445_05_main_20_testIrBallotInvalidation
Team Member(s) Responsible	Aaron Kandikatla
Inputs	<ol style="list-style-type: none"> 1. IR csv file named <code>ir_test_ballot_invalidation.csv</code> <ol style="list-style-type: none"> a. 4 candidates b. 9 ballots

	c. 3 ballots with only 1 candidate ranked
Tests	1. Test that the generated audit and report files match the expected audit and report files exactly
Outputs	1. test_ir_ballot_invalidation_audit_actual.txt matches test_ir_ballot_invalidation_audit_expected.txt 2. test_ir_ballot_invalidation_report_actual.txt matches test_ir_ballot_invalidation_report_expected.txt
Result (Pass or Fail)	Pass
Date	4/28/21

PBI #	6
PBI Description	As an election official, I want the IR election system to invalidate ballots that do not rank at least half of the candidates so that the requirement by state election officials is met.
Task Description	Create new tests for the addBallot function that takes into consideration the invalidation of ballots and create their respective log files
Test Description	Tests that IR's <code>runElection</code> method runs correctly with 0 ballots
Test ID	test_446_07_runElection_05_testRunElectionZeroBallots
Team Member(s) Responsible	Nikunj Chawla
Inputs	1. 4 candidates, 0 ballots
Tests	1. Test that the generated audit and report files match the expected audit and report files exactly
Outputs	1. test_run_election_zero_ballots_audit_actual.txt matches test_run_election_zero_ballots_audit_expected.txt 2. test_run_election_zero_ballots_report_actual.txt matches test_run_election_zero_ballots_report_expected.txt
Result (Pass or Fail)	Pass
Date	4/28/21

PBI #	6
PBI Description	As an election official, I want the IR election system to invalidate ballots that do not rank at least half of the candidates so that the requirement by state election officials is met.
Task Description	Create new tests for the addBallot function that takes into consideration the invalidation of ballots and create their respective log files
Test Description	Tests that the IR voting system runs correctly with 0 ballots
Test ID	test_447_05_main_21_testIrZeroBallots
Team Member(s) Responsible	Nikunj Chawla
Inputs	<ol style="list-style-type: none"> 1. IR csv file named ir_test_zero_ballots.csv <ol style="list-style-type: none"> a. 4 candidates b. 0 ballots
Tests	<ol style="list-style-type: none"> 1. Test that the generated audit and report files match the expected audit and report files exactly
Outputs	<ol style="list-style-type: none"> 3. test_ir_zero_ballots_audit_actual.txt matches test_ir_zero_ballots_audit_expected.txt 4. test_ir_zero_ballots_report_actual.txt matches test_ir_zero_ballots_report_expected.txt
Result (Pass or Fail)	Pass
Date	4/28/21