

16.02 Assignment Instructions

Instructions: Create a mock election project to demonstrate traversal algorithms, using the results of a mock election with an arrays and `ArrayList`.

1. Create a folder called **16.02 Assignment** in your Module 16 assignments folder.
2. Copy your `ElectionTesterV1.java` and `ElectionTesterV2.java` files to the new folder. Rename V1 to V3 and V2 to V4. Be sure to update the class statement as well, to reflect the new versions.
3. Modify the `ElectionTesterV3` program to include the following:
 - a. a method that will find a particular candidate by name and change the name for that candidate. Its arguments should include the array, a name to find, and the replacement name.
 - b. a method that will find a particular candidate by name and change the number of votes for that candidate. Its arguments should include the array, a name to find, and the replacement votes.
 - c. a method that will find a particular candidate by name and replace both the name and number of votes for that candidate. Its arguments should include the array, a name to find, the replacement name, and the replacement votes.
4. Test your program by calling each of the methods. Be sure to print the election results after each change. See the sample output below. Clearly announce the change that should occur so someone reading your output knows which change occurred.
 - a. change a candidate's name
 - b. change a candidate's vote count
 - c. change a candidate by replacing the name and number of votes
5. Now modify the `ElectionTesterV4` class that uses an `ArrayList` to include the same functionality as the array version.

Expected Output: This is a sample of the expected output. The details will vary based on design choices you make while completing the project.



Options

Original results:

Candidate	Votes Received	% of Total Votes
Lucy Robertson	6000	38.71
Marie Grace	2400	15.48
Rusty Jordan	1800	11.61
A_____ S_____	3200	20.65
C_____ T_____	2100	13.55

Total number of votes cast in election: 15500

<< Changing Marie Grace to Earl Rossburg >>

Candidate	Votes Received	% of Total Votes
Lucy Robertson	6000	38.71
Earl Rossburg	2400	15.48
Rusty Jordan	1800	11.61
A_____ S_____	3200	20.65
C_____ T_____	2100	13.55

Total number of votes cast in election: 15500

<< Changing Lucy Robertson votes to 4500 >>

Candidate	Votes Received	% of Total Votes
Lucy Robertson	4500	32.14
Earl Rossburg	2400	17.14
Rusty Jordan	1800	12.86
A_____ S_____	3200	22.86
C_____ T_____	2100	15.00

Total number of votes cast in election: 14000



