

16.04 Assignment Instructions

Instructions: Working with the mock election, you will establish deletion algorithms to make updates to the array and `ArrayList` for the candidates.

1. Create a folder called **16.04 Assignment** in your Module assignments folder.
2. Copy your `ElectionTesterV5.java` and `ElectionTesterV6.java` files to the new folder. Rename V5 to V7 and V6 to V8. Be sure to update the class statement as well to reflect the new versions.
3. Modify the `ElectionTesterV6` program to include the following:
 - a. a method that will delete a particular candidate by position in the election array. Its arguments should include the array and a position to delete.
 - b. a method that will find a particular candidate by name and delete that candidate. Its arguments should include the array the name of the candidate to delete.
 - c. modify the other methods related to traversing, replacing, and inserting since you are working with an array. They need to work even if the array has some `null` entries.
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. delete a candidate by position
 - b. delete a candidate by name
5. Now modify the `ElectionTesterV8` class that uses an `ArrayList` to include the same functionality as the array version.
6. The final output for V7 and V8 needs to show the insertion and deletion methods in action. Be sure to clearly label each change so you can verify the code worked properly.

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

Candidate	Votes Received	% of Total Votes

Lucy Robertson	6000	18.80
Marie Grace	2400	7.52
Ada Hopper	1111	3.48
Rusty Jordan	1800	5.64
A_____S_____	3200	10.03
Hamilton Wilde	9300	29.14
C_____T_____	2100	6.58
B_____R_____	540	1.69
D_____N_____	860	2.69
F_____L_____	4600	14.42

Total number of votes cast in election: 31911

<< Delete location 7 >>

Candidate	Votes Received	% of Total Votes

Lucy Robertson	6000	19.13
Marie Grace	2400	7.65
Ada Hopper	1111	3.54
Rusty Jordan	1800	5.74
A_____S_____	3200	10.20
Hamilton Wilde	9300	29.65
C_____T_____	2100	6.69
D_____N_____	860	2.74
F_____L_____	4600	14.66

Total number of votes cast in election: 31371

<< Delete Lucy Robertson >>

Candidate	Votes Received	% of Total Votes

Marie Grace	2400	9.46
Ada Hopper	1111	4.38
Rusty Jordan	1800	7.09
A_____S_____	3200	12.61
Hamilton Wilde	9300	36.66
C_____T_____	2100	8.28
D_____N_____	860	3.39
F_____L_____	4600	18.13

Total number of votes cast in election: 25371



