

16.02 Assignment Instructions

Instructions: For this assignment, you are going to create replacement methods.

1. Create a folder called **16.02 Assignment** in your Module 16 assignments folder.
2. Copy your **TestCandidate.java** to a new class **TestCandidate3.java**.
3. Modify your election array to add in the following people.

Candidate	Vote
Mickey Jones	3000
Rebecca Morgan	2000
Kathleen Turner	8000
Tory Parker	500
Ashton Davis	10000

4. Create the following methods for modify election results.
 - a. Create a method that will find a particular candidate by name and change the name for that candidate. Call it **replaceName()**. Its arguments should include the array, a name to find, and the replacement name.
 - b. Create a method that will find a particular candidate by name and change the number of votes for that candidate. Call it **replaceVotes()**. Its arguments should include the array, a name to find, and the replacement votes.
 - c. Create a method that will find a particular candidate by name and replace both the name and number of votes for that candidate. Call it **replaceCandidate()**. Its arguments should include the array, a name to find, the replacement name, and the replacement votes.
 - d. Test your methods by changing Michael Duffy's name to John Elmos. Then change the number of votes for Mickey Jones to 2500. Finally replace Kathleen Turner's name and votes with John Kennedy and 8500 votes. You should call **printResults()** first and then after each change. Your output should be similar to output shown below: Remember to turn on unlimited buffering in BlueJ so that you can see the results.

```
BlueJ: Terminal Window - demo

Options

Original results:

Candidate          Votes Received      % of Total Votes
John Smith         5000                12
Mary Miller        4000                9
Michael Duffy      6000                14
Tim Robinson       2500                6
Joe Ashtony        1800                4
Mickey Jones       3000                7
Rebecca Morgan     2000                5
Kathleen Turner    8000                19
Tory Parker        500                 1
Ashton Davis       10000               23

Total number of votes in election: 42800

Changing Michael Duffy to John Elmos:

Candidate          Votes Received      % of Total Votes
John Smith         5000                12
Mary Miller        4000                9
John Elmos         6000                14
Tim Robinson       2500                6
Joe Ashtony        1800                4
Mickey Jones       3000                7
Rebecca Morgan     2000                5
Kathleen Turner    8000                19
Tory Parker        500                 1
Ashton Davis       10000               23

Total number of votes in election: 42800
```

```
BlueJ: Terminal Window - demo

Options

Changing Mickey Jones votes to 2500:

Candidate          Votes Received      % of Total Votes
John Smith          5000                  12
Mary Miller         4000                  9
John Elmos          6000                 14
Tim Robinson        2500                  6
Joe Ashtony         1800                  4
Mickey Jones        2500                  6
Rebecca Morgan      2000                  5
Kathleen Turner     8000                 19
Tory Parker         500                   1
Ashton Davis       10000                 24

Total number of votes in election: 42300

Replacing Kathleen Turner with John Kennedy:

Candidate          Votes Received      % of Total Votes
John Smith          5000                  12
Mary Miller         4000                  9
John Elmos          6000                 14
Tim Robinson        2500                  6
Joe Ashtony         1800                  4
Mickey Jones        2500                  6
Rebecca Morgan      2000                  5
John Kennedy        8500                 20
Tory Parker         500                   1
Ashton Davis       10000                 23

Total number of votes in election: 42800
```

5. Now create a class **TestCandidate4** and save it as **TestCandidate4.java**.
 - a. Create the same items as for **TestCandidate3**; however, use an **ArrayList** instead.
 - b. Output should still look the same as for **TestCandidate3**.