

## 16.03 Assignment Instructions

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

1. Create a folder called **16.03 Assignment** in your module 16 assignments folder.
2. Copy your **TestCandidate3.java** to a new class **TestCandidate5.java**.
3. Create the following methods for inserting election results:
  - a. Create a method that will find a particular candidate by position in the election array. Your method will then add a new candidate before that position. Call it **insertPostion()**. Its arguments should include the array, a position to insert, the name to add, and the votes to add.
  - b. Create a method that will find a particular candidate by name and then insert a new candidate before that candidate. Call it **insertCandidate()**. Its arguments should include the array, a name to find, and the candidate and votes to insert.
  - c. Test your methods by first adding Woody Pride, 19,300 votes in position 5, and then add Joy Anderson, 1,100 votes, before Kathleen Turner. You should call **printResults()** first and then after each insert. Your output should be similar to output shown below. Remember to turn on unlimited buffering in BlueJ, so that you can see the results.

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		
Added Woody Pride, 19300 votes:		
Candidate	Votes Received	% of Total Votes
John Smith	5000	10
Mary Miller	4000	8
Michael Duffy	6000	12
Tim Robinson	2500	5
Joe Ashtony	1800	3
Woody Pride	19300	37
Mickey Jones	3000	6
Rebecca Morgan	2000	4
Kathleen Turner	8000	15
Tory Parker	500	1
Total number of votes in election: 52100		
Added Joy Anderson, 1100:		
Candidate	Votes Received	% of Total Votes
John Smith	5000	9
Mary Miller	4000	8
Michael Duffy	6000	11
Tim Robinson	2500	5
Joe Ashtony	1800	3
Woody Pride	19300	37
Mickey Jones	3000	6
Rebecca Morgan	2000	4
Joy Anderson	1100	2
Kathleen Turner	8000	15
Total number of votes in election: 52700		

- 4 Now create a class **TestCandidate6** and save it as **TestCandidate6.java**.
- Create the same items as for **TestCandidate5**; however, use an ArrayList instead.
  - Output should look like that below.

```
BlueJ: Terminal Window

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

Added Woody Pride, 19300 votes:

Candidate          Votes Received      % of Total Votes
John Smith         5000                8
Mary Miller        4000                6
Michael Duffy      6000                10
Tim Robinson       2500                4
Joe Ashtony        1800                3
Woody Pride        19300               31
Mickey Jones       3000                5
Rebecca Morgan     2000                3
Kathleen Turner    8000                13
Tory Parker        500                 1
Ashton Davis       10000               16

Total number of votes in election: 62100

Added Joy Anderson, 1100:

Candidate          Votes Received      % of Total Votes
John Smith         5000                8
Mary Miller        4000                6
Michael Duffy      6000                9
Tim Robinson       2500                4
Joe Ashtony        1800                3
Woody Pride        19300               31
Mickey Jones       3000                5
Rebecca Morgan     2000                3
Joy Anderson       1100                2
Kathleen Turner    8000                13
Tory Parker        500                 1
Ashton Davis       10000               16

Total number of votes in election: 63200
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