07.04 Assignment Instructions

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

1. Create a folder called 07.04 Assignment in your Module 07 Assignment folder.
2. Download the **Candidate.java** to the newly-created folder.
    a. Observe the class instance variables `name` and `numVotes`.
    b. A constructor is provided.
    c. Getter and setter methods provided, as well as a `toString` method.
3. For this project, you will create two tester classes. One to demonstrate your algorithms with an array and the other for an `ArrayList`.
4. Create a class called `ElectionTesterV1`. This will be the tester for the array version. The class needs to contain the following:
    a. An array containing five `Candidate` objects with their name and number of votes.
    b. A method to print the candidate names and votes that traverses through the array and prints out each element.
    c. A method that traverses through the array and counts the total of the votes for all the candidates. It should return that number. This method will be used by the method to print the table.
    d. A method called that traverses through the array and creates a table with columns for the candidate name, followed by votes received, and then percentage of total votes. After printing the table, print a statement showing the total number of votes for the election.
    e. Test your methods. Your output should be similar to that shown below.
5. Now create a class `ElectionTesterV2`. This class will be the tester for the `ArrayList` version of the project. Repeat the steps above but this time using an `ArrayList`.

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

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Options

 Raw Election Data:


Tony Stark received 3691 votes.
Henry Pym received 2691 votes.
B____ B_____ received 1962 votes.
S____ R_____ received 1491 votes.
C____ D_____ received 1968 votes.



Election Results:


                    Votes            % of Total
Candidate           Recieved           Votes
=========================================
Tony Stark            3691              31.27
Henry Pym             2691              22.80
B____ B_____          1962              16.62
S____ R_____          1491              12.63
C____ D_____         1968              16.67

The total number of votes is: 11803


 Can only enter input while your programming
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