

STEP 1:

In this election, 2 candidates are running:
Candidate 1: Valerie
Candidate 2: Anders

STEP 2:

For candidate Valerie:
There are 654 donations.
Total amount is \$161400.0.
Average contribution was \$246.78899082568807.
For candidate Anders:
There are 1013 donations.
Total amount is \$267725.0.
Average contribution was \$264.28923988153997.

STEP 3:

Donations from underage donors:
There are 24 donations.
Total amount is \$7050.0.
Average contribution was \$293.75.

STEP 4:

Following donors exceeded amount limit per election:
Barbara Emmanuel contributed \$1675.0.
Willard Banks contributed \$1700.0.

STEP 5:

Females for candidate Valerie:
There are 258 donations.
Total amount is \$63375.0.
Average contribution was \$245.63953488372093.
Males for candidate Valerie:
There are 396 donations.
Total amount is \$98025.0.
Average contribution was \$247.53787878787878.
Females for candidate Anders:
There are 491 donations.
Total amount is \$130575.0.
Average contribution was \$265.9368635437882.
Males for candidate Anders:
There are 522 donations.
Total amount is \$137150.0.
Average contribution was \$262.7394636015326.

The election season is upon us. The amount of money a candidate raises against his/her opponent greatly affects the outcome of the election. Anders and Valerie (completely fictional characters) are two fierce opponents fighting for the democratic party nomination.

Your job is to write a program that will help us analyze a list of donations.

Make sure that you are using a class to represent the data in memory **[40 points]**.

Data file may contain empty rows -- make sure to skip empty rows while reading the csv file in your python program. You may assume that if candidate cell is empty (""), the row is empty and needs to be skipped. **[10 points]**

If gender column is not one of the allowed values (male or female), assume female (do not skip the donation). **[10 points]**

In your python code:

Step 0 [40 points]: Write a function that will take a list of donation objects as input argument and print out the number of donations in the list, the total amount of those donations and the average donation amount.

Step 1 [30 points]: Determine how many candidates are running and display on screen as shown in the screenshot.

Step 2 [30 points]: For each candidate, report the number of contributions, total amount of contributions and average contribution per donation.

Step 3 [30 points]: No one younger than the age of 21

should donate to political campaigns. Check and report if there are any donations violating this rule.

Step 4 [30 points]: No individual can contribute more than \$1600 in an election. Check and report the names of those individuals who contributed more than the allowed limit.

Step 5 [30 points]: For each candidate report the donation count, total amount and average per gender. See the example output on the left.

Avoid Penalties:

- Your program does not compile and/or crashes while running (-40).
- Your program is not properly indented and/or commented (-40).

Assume that I will deduct the maximum amount if you hit these penalties. I will also deduct the maximum amount if any of the features of the program is not functioning properly.