**PyBank**

\* Your task is to create a Python script that analyzes the records to calculate each of the following:

1. The total number of months included in the dataset
2. The net total amount of "Profit/Losses" over the entire period
3. The average of the changes in "Profit/Losses" over the entire period
4. The greatest increase in profits (date and amount) over the entire period
5. The greatest decrease in losses (date and amount) over the entire period
6. In addition, your final script should both print the analysis to the terminal and export a text file with the results.

\* As an example, your analysis should look similar to the one below:

```text

Financial Analysis

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Total Months: 86

Total: $38382578

Average Change: $-2315.12

Greatest Increase in Profits: Feb-2012 ($1926159)

Greatest Decrease in Profits: Sep-2013 ($-2196167)

Steps

1. Read I the CSV file for use in the program
2. Copy it into a list
3. Find the length of the list (answers a above)
4. Add up the column “Profit/losses”
   1. Values in the list must be in int format to do math calcs on them
5. Add a column to the list titled “change in profit”
6. Calculate values for change from row-to-row in the profits/loss column & return values in this new column
7. Calculate the average change in value in the change in profit column – is there a function that will do this?
8. Find the max value in the column “change in profit”
9. Find the corresponding date in column 0 to the max change in profit
10. Find the min value in the column “change in profit”
11. Find the corresponding date in column 0 to the min change in profits
12. Print out the Financial Analysis table, applying appropriate formatting (add $ sign for $, date format for dates)
13. Create a (dictionary, list?) to hold the analysis results
14. Export the results to a text file

for i in range(len(profits)):

profitchg = profits(i + 1) - profits(i)

profitchange.append(profitchg)

**PyPoll**

\* In this challenge, you are tasked with helping a small, rural town modernize its vote-counting process.

\* You will be give a set of poll data called [election\_data.csv](PyPoll/Resources/election\_data.csv). The dataset is composed of three columns: `Voter ID`, `County`, and `Candidate`. Your task is to create a Python script that analyzes the votes and calculates each of the following:

\* The total number of votes cast

\* A complete list of candidates who received votes

\* The percentage of votes each candidate won

\* The total number of votes each candidate won

\* The winner of the election based on popular vote.

\* As an example, your analysis should look similar to the one below:

```text

Election Results

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Total Votes: 3521001

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Khan: 63.000% (2218231)

Correy: 20.000% (704200)

Li: 14.000% (492940)

O'Tooley: 3.000% (105630)

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Winner: Khan

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```

\* In addition, your final script should both print the analysis to the terminal and export a text file with the results.

Steps

1. Read I the CSV file for use in the program
2. Assume each row is a vote, add up the rows to get total votes
3. Find unique values in the ‘Candidate’ field
4. Use candidate names to add up the total votes corresponding to each candidate
5. Calculate the % of total votes each candidate won
6. Determine the winner of the election (highest votes or %)