SE Factory_ Challenge

Rules

1. If you google the answer and you do not submit the correct code used to derive it, we will have to disqualify your submission
2. You can submit the source code for your solution in any programming/scripting language of choice (Python, PHP, or JavaScript) as long as you provide proper instructions on how to compile (if need be) and run it
3. If your code does not compile and run as per your instructions, we will have to disqualify your submission
4. The time of your submission will be the time we receive your email
5. Make sure the subject of your email submission is **"Challenge - Solution"**
6. Compress all the source code into one Zip file and make sure to name it: **"FirstName LastName - Challenge Solution.zip"**

Problem

Bitcoin (BTC) is a virtual currency i.e., digital money. "It is the first decentralized peer-to-peer payment network that is powered by its users with no central authority or middlemen". Are you familiar with it?

No? Read this: [Bitcoin FAQ](#)

One of the beautiful things about bitcoin is that its ledger of transactions and the data generated by the network are all freely available for anyone to conduct any type of data analysis needed, in Real-Time.

In the folder appendix accompanying this problem set, you will find a CSV file containing the Bitcoin Exchange Rates data set for the past 3 months (December 2015 to February 2016). The file is named: BAVERAGE-USD.csv

Note: CSV files can be opened in Excel and any text editor.

In any programing/scripting language of choice, you need to **parse** BAVERAGE-USD.csv and **calculate** the following:

1. Total average BTC/USD value for entire period (December 2015 to February 2016)
2. Average BTC/USD value for each month (December, January, February)
3. Maximum BTC/USD value for each month (December, January, February)
4. Minimum BTC/USD value for each month (December, January, February)

Considerations:

The program should take as input: the path to the data file
Your program should run and print out results in less than: 5 seconds

Your program should run in Command Prompt or the Terminal and should use the Standard Input/Output libraries

Sample Input/Output

INPUT :

```
(Windows)
Type the path to the data file:
C:\BAVERAGE-USD.csv

(Linux/OSX)
Type the path to the data file:
/Users/username/Desktop/BAVERAGE-USD.csv
```

OUTPUT :

```
Total Average BTC/USD: 420$
Average BTC/USD value for December 2015: 350$
Average BTC/USD value for January 2016: 400$
Average BTC/USD value for February 2016: 430$
Maximum BTC/USD value for December 2015: 360$
Maximum BTC/USD value for January 2016: 450$
Maximum BTC/USD value for February 2016: 430$
```

Note: Your code should execute without bugs/errors on either Windows or Linux/OSX.
Working on both platforms is a bonus!

Submission

Submit your solution via email to *charbeld@sefactory.io*