

Homework project

Subject

The objective of this project is to create a simple yet complete python program to compute the correlation between multiple stocks. You have full freedom over where and how to get your data from, and the means to compute the correlation.

Here is the output of an imaginary program that would fulfill the work:

```
$ compute-correlation --start-date=2010-01-01 --last-date=2010-01-11
--stocks=AAPL,MSFT,GOOG
+-----+-----+-----+-----+
|          | AAPL | GOOG | MSFT |
+-----+-----+-----+-----+
| AAPL | 1.00 | 0.81 | 0.93 |
+-----+-----+-----+-----+
| GOOG | 0.81 | 1.00 | 0.86 |
+-----+-----+-----+-----+
| MSFT | 0.93 | 0.86 | 1.00 |
+-----+-----+-----+-----+
```

Tips

- The objective of this project is to showcase your whole software engineering practices, not just your coding skills. Think about how you would package, document and test this software.
- The deliverable must be a Git repository, sent by e-mail at least 6 hours before the presentation meeting.
- For those scared by the word "correlation", visit https://en.wikipedia.org/wiki/Covariance_and_correlation for a sensible definition.
- There are no constraints on libraries or tools here. You can use whatever you need if you think that makes sense.
- Of course you do not have to worry about the symbology (stock names) used in the example output.
- There is no time constraint of the project, spend 1 hour or 10, it's your choice.
- Feel free to surprise us with whatever good ideas you have!