

1. My approach

I got historic data for RUI[^] using yfinance module (for more information please follow <https://pypi.org/project/yfinance/>) during March 2019, and built in a chart by Close price.

I provided the data for March to the program, in particular:

Open, High, Low prices as independent data,

Close as dependent data.

As there were 3 parameters to depend on, I used multiple regression by sklearn (for more information please follow <https://scikit-learn.org/stable/>)

I got historic data for RUI[^] using yfinance module during April 2019, and built in a chart by Close price.

I made predictions for every day of April 2019 by using historic values of Open, High and Low prices at the that. I collected the predicted results of Close price for every day on April 2019 to the list, and built a chart.

2. Data collection

I collected historic data using download method of yfinance module. I used data for 'RUI[^]' and period of March 2019 as the 'known data'.

3. How I constructed my model and why I chose it, and how I weighted the components in my simulated index

I used model of 3 prices to depend on (Open, High, Low) and 1 price to be depended (Close). I used Multiple Regression based on Linear Regression as I had 3 prices parameters to depend on. I weighted these components equally.

4. Report details

For predictions improvement bigger set of data could be used.

Other parameters to depend on also could be added.

Please read Readme.md for more details how to run the program.