In short, our goal is to replicate the strategies written in OLPS Matlab.

To do this, we need to write our own code in python, and then compare the output plots with that in matlab to confirm our code is working.

The current hierarchy of classes are as follows:

Strategy

run(df:pd.Dataframe)

name()

I’ve tried to make the interface as friendly as possible so that you can focus purely on the replication part.

Essentially, you just need to change the code in the following picture to test your replication:

Text

Description automatically generated

Comment/Uncomment the corresponding dataset you would like to use.

Change df\_name into an appropriate string.

Change the strategies in ‘strats’. Note that class names are used as variables here.

Then compare your result with matlab’s:

For example:

Some of you were worried about your coding skills for this project. There is no need to. However, you still need to learn to use pandas, numpy, scipy and possibly other packages to complete the replication task. Their usage are listed as follows:

Pandas: to deal with dataframes(tables, .csv, time series)

Numpy: linear algebra

Scipy: other mathematical tools such as optimization

They should be relatively straightforward to implement. Google should serve as the biggest helper. Feel free to ask questions though.

We will determine allocation of the strategies in the weekly meeting.

If you have any questions regarding anything, feel free to pin me.

Thank you for the effort.

Polo