

Download the file `interview_THA.zip`, which contains the following files:

- `Interview.parquet`
- `Interview_test.parquet`
- `Interview_info.parquet`

The `Interview.parquet` file includes six months of data on open, close, high, low, and volume for equities. Information about each column is provided in the `Interview_info.parquet` file. For all tasks, use `Interview.parquet` for training and validation, and `Interview_test.parquet` for testing.

Tasks:

1. Data Preparation:

- Clean and convert the data to make it suitable for time-series analysis.

2. Grouping Method:

- Develop a method to group the tickers into subgroups. These groups can be based on any characteristics or assumptions.
- What assumptions did you make?
- What characteristics did you consider when grouping?

3. Predictive Modeling:

- Select all tickers or tickers from any subgroup and build a time-series predictive model. You may choose one or multiple time-series data (e.g., open, close, high, low, or volume) as inputs and apply any feature engineering techniques you find suitable. The model should predict one of the time-series data (e.g., open, close, high, low, or volume).
- What feature engineering methods did you use?
- Does the model perform well across all tickers?

Requirements:

- You must use any machine learning package to build the predictive model. There are no restrictions on the choice of the model, but you should not use time-series statistical packages for building the model. However, you may use these statistical packages for analytical purposes.
- Provide a downloadable link (e.g., online drives or Google Colab) that includes the following items:
 - A notebook with the code and answers to the questions.
 - The saved model.

Please note that you do not need to create a presentation or slides.