

Assignment 2: Applying Moving Averages Strategy

Instructions

1. Open a Jupyter notebook and name it "Assignment 2 - Your Name".
2. There is an Excel file named **Tickers** on the course page, which lists five company tickers assigned to each student.
3. Using one of the tickers assigned to you, apply a moving average strategy on data from January 1, 2023 to December 31, 2024, using a 25-day Simple Moving Average (SMA) as the short-term average and a 100-day SMA as the long-term average.
4. Evaluate the strategy under the following three conditions:
 - **Condition 1:** If short SMA $>$ long SMA \rightarrow take a buy position (+1). Otherwise \rightarrow take a short position (-1)
 - **Condition 2:** If short SMA $>$ long SMA \rightarrow take a buy position (+1). Otherwise \rightarrow take no position (0)
 - **Condition 3:** If short SMA $>$ long SMA \rightarrow take no position (0). Otherwise \rightarrow take a short position (-1)
5. For each condition, calculate the cumulative return of the strategy and upload your notebook on the course page. Make sure your code is well-documented and clearly indicates each step.