

# Assignment 1

## **Python is preferred for solving.**

Import the data(OHLCV) for the past 10 years of the ticker 'MSFT' from quandl or yahoo finance. (10%)

Check if the process is stationary or not using ADF and Autocorrelation plot. Also comment, what condition out of the 3 is violated. (30%)

If the data is not stationary, make it stationary. (10%)

After making the data stationary, define technical indicators in the same dataframe as taught to you in wall street lectures. Code up the following technical indicators:

RSI, MFI, MACD, %K, BB using

TALib(<https://towardsdatascience.com/trading-strategy-technical-analysis-with-python-ta-lib-3ce9d6ce5614>) or on your own. Following this, keep the Adjusted Close as your output target variable and rank the features, in this case the technical indicators using the appropriate feature selection tests. (50%)

**Note:** If you are stuck anywhere, always remember Google is your friend. Try and search google effectively. If there are still doubts in concept and/or syntax, feel free to message any of the instructors.

Happy Coding!