Assignment

This assignment must be submitted within 7 days from the date received. In this assignment, let's try to implement a back-test logic for a trading strategy. The completeness of the assignment and organisation of the code is important.

Data Ingestion-

- Use an API to download data (4H/1D candles) for at least 50 stocks / crypto for 1 year
- Store it in a folder/database

Implement a backtest code with the following assumptions-

- We start with unlimited capital
- In each trade we buy tokens worth 100 USD
- At the end of the back-test period we sell everything we're holding

STRATEGY (**Bollinger Band Reversal) –**

BUY - if the price falls 3% below the lower Bollinger band
SELL – if the price touches the upper Bollinger band

BACKTEST –

- Use OOP to implement a backtest code to simulate trades according to the above strategy for all the tokens over the 1-year period.
- The output should be a final DataFrame with each row representing a trade, with the columns - token, date_in, buy_price, date_out, sell_price, profit_percentage and save it.
- Implement a simple web application to visualize the data.