Stock Market Analysis 📈 + Prediction using LSTM

Change in price over time:

This involves analyzing the historical data of a stock's price and plotting it over time to see how it has changed. This can help identify trends and patterns that can be used to make future predictions about the stock's price.

Moving average:

A moving average is a calculation of the average price of a stock over a specified period of time. This can help smooth out any fluctuations in price and provide a more accurate representation of the stock's trend.

Daily return:

This refers to the percentage change in a stock's price from one day to the next. Calculating the average daily return can help investors determine the potential risk and reward of investing in a particular stock.

Correlation between different stocks:

This involves analyzing the relationship between the closing prices of different stocks to see if they move in a similar or opposite direction. This can help investors diversify their portfolio and minimize risk.

Value at risk:

This refers to the potential loss that an investor may face by investing in a particular stock. It can be calculated by analyzing the historical data of a stock's price and volatility and using statistical methods to determine the likelihood of a significant loss.

Predicting the closing price:

This involves using a machine learning technique called Long Short-Term Memory (LSTM) to predict the future closing price of a stock based on its historical data. LSTM is a type of neural network that can recognize patterns in time-series data and make predictions based on those patterns. This can be useful for investors who want to make informed decisions about buying or selling a stock.