Link:

<https://statso.io/quantitative-analysis-case-study/>

The given dataset is a rich resource for performing in-depth quantitative analysis, offering comprehensive insights into market trends and stock behaviour. Key characteristics of the dataset are:

1. Ticker: The stock ticker symbol.
2. Date: The specific trading date.
3. Open: Opening price of the stock for the day.
4. High: Highest price point of the stock during the day.
5. Low: Lowest price point during the day.
6. Close: Closing price of the stock.
7. Adj Close: Adjusted closing price, factoring in corporate actions like splits.
8. Volume: Total trading volume of the stock.

Your task is to perform quantitative analysis to gain a deeper understanding of stock market dynamics and to inform investment strategies. The specific goals include:

* **Trend Analysis**: Identifying long-term trends in stock prices and market movements.
* **Volatility Assessment**: Evaluating the stability and risk associated with different stocks based on their price fluctuations.
* **Correlation Study**: Investigating how different stocks correlate with each other, understanding market segments and diversification opportunities.
* **Risk-Return Trade-off Analysis**: Analyzing the balance between the potential risks and rewards of different stocks, aiding in portfolio management.

**References to Solve this Data Science Case Study**

<https://thecleverprogrammer.com/2024/01/15/quantitative-analysis-of-stock-market-using-python/>