HISTORICAL STOCK PRICE OF 10 POPULAR COMPANIES

PROJECT OVERVIEW

You will be working with a dataset containing historical stock prices of 10 popular companies: Apple, Amazon, Netflix, Microsoft, Google, Facebook, Tesla, Walmart, Uber, and Zoom. The dataset spans from 2015 to 2021 and includes daily data with variables such as Date, Open, High, Low, Close, Volume, and Adjusted Close.

Your task is to generate meaningful business insights from this data, create a Power BI report, and summarize your findings. Additionally, you'll need to record a video presentation of your analysis and share it on LinkedIn.

Business Questions to Explore(Minimum)

1. **How have the stock prices of each company trended over time?**
   - **Guide**: Create line charts to visualize the trends for each company's closing prices over the years. Identify any significant peaks, dips, or patterns in the data.
2. **Which company experienced the highest growth in stock price during the period?**
   - **Guide**: Calculate the percentage change in the closing prices from 2015 to 2021 for each company. Use a bar chart to compare the growth rates.
3. **What are the periods of highest trading volume for each company?**
   - **Guide**: Use bar charts or line charts to visualize the trading volumes over time. Highlight the dates or periods with unusually high trading activity and analyze potential reasons.
4. **How do the opening and closing prices compare for each company?**
   - **Guide**: Create a comparative analysis using clustered bar charts or dual-axis charts to compare the opening and closing prices. This can reveal the volatility of the stocks within a single day.
5. **Which company had the most stable stock price during this period?**
   - **Guide**: Calculate the standard deviation of the closing prices for each company. Use this to create a bar chart comparing the stability of each stock.
6. **Are there any correlations between the stock prices of these companies?**
   - **Guide**: Use a scatter plot matrix or a correlation matrix to explore relationships between the closing prices of different companies. Identify any strong positive or negative correlations.
7. **What was the impact of significant market events on these companies' stock prices?**
   - **Guide**: Identify key global or market events (like the 2020 pandemic) and analyze their impact on stock prices. Use annotations on your line charts to mark these events and discuss their effects.

Submission Guidelines

- **Summarize Your Findings**: After creating your report, write a concise summary of your key insights and conclusions.
- **Video Presentation**: Record a video presentation (minimum 2 minutes) explaining your analysis and findings.
- **Upload Requirements**: Upload the video to your LinkedIn account and include a link to the GitHub repository where you will store the dataset and your Power BI report.
- **Deadline**: The submission deadline is 4th September 2024