1. Netflix Data Analysis
    a. Successfully completed a data analysis project on Netflix, analyzing a dataset of over 8,800 movies and TV shows available on the platform, showcasing expertise in data exploration and visualization techniques.
    b. Utilized Python libraries such as Pandas, Matplotlib, and Seaborn to conduct in-depth analysis, generating insightful visualizations and uncovering trends in content availability, genres, and country contributions.
    c. Demonstrated strong data cleaning skills by effectively handling missing values and converting date formats, ensuring accurate and reliable analysis results.
    d. Presented findings through captivating visualizations, including pie charts, bar charts, word clouds, and heatmaps, effectively communicating complex information to diverse audiences.
    e. Conducted historical analysis, focusing on the past ten years, to provide an in-depth understanding of content trends over time, showcasing a keen eye for detail and the ability to extract meaningful insights from data.

2. Recession Analysis
    a. Successfully conducted an in-depth data analysis project on the UK economy, analyzing monthly GDP growth data spanning from January 2020 to present, demonstrating proficiency in data exploration and visualization techniques.
    b. Leveraged Python libraries such as Pandas, Plotly, and Google Colab to process, visualize, and interpret complex economic data, generating compelling graphs, including heatmaps, line charts, and bar graphs, enabling effective communication of key insights.
    c. Showcased exceptional data cleaning and preprocessing skills by seamlessly handling missing values and converting date formats, ensuring accurate and reliable analysis outcomes, and providing trustworthy information for critical decision-making.
    d. Applied advanced statistical techniques, including resampling and aggregation, to transform the original monthly GDP data into insightful quarterly metrics, enabling a more comprehensive understanding of economic trends and facilitating strategic planning.
    e. Analyzed historical recession patterns by identifying recession periods based on negative GDP growth, quantifying the duration and severity of each recession, and presenting the findings through visually appealing bar graphs, showcasing the ability to extract valuable insights from complex economic data.
3. Stock Market Analysis

    a. Achieved comprehensive market insights: I utilized the powerful "yfinance" library to collect and analyze stock market data for leading companies such as Apple (AAPL), Microsoft (MSFT), Netflix (NFLX), and Google (GOOG). By

leveraging historical price data over the last three months, I gained valuable insights into the market trends and performance of these companies.

b. Visualized complex data effectively: Using the Plotly library, I created visually appealing and interactive charts to present the stock market performance and trends. For example, I generated line charts that showcased the closing prices of the selected companies over time, allowing stakeholders to easily
c. identify patterns and make informed decisions. Additionally, I created area charts that compared the stock prices of multiple companies, enabling quick comparisons and analysis.
d. Implemented advanced analytics techniques: To further enhance my analysis, I implemented moving average calculations to identify short-term and long-term trends for each company. By calculating the 10-day and 20-day moving averages, I provided stakeholders with valuable information on potential price reversals and trend confirmations. Additionally, I computed volatility metrics by analyzing the percentage change in closing prices over a rolling 10-day period, enabling stakeholders to assess risk and market fluctuations.
e. Throughout the project, I consistently demonstrated my ability to handle large datasets, apply statistical techniques, and effectively communicate insights. By combining my technical expertise with a deep understanding of financial markets, I provided actionable information for stakeholders, enabling them to make informed decisions and achieve their investment goals.

4. Superstore Marketing Campaign
    a. Successfully completed a data analysis project on a customer dataset of a superstore, consisting of 2,240 records, demonstrating proficiency in data exploration and visualization techniques.
    b. Utilized Python libraries including Pandas, Matplotlib, and Seaborn to perform comprehensive analysis, generating informative visualizations and revealing valuable insights into customer behavior, purchasing patterns, and demographic trends.
    c. Demonstrated exceptional data preprocessing skills by effectively handling missing values, resulting in a clean dataset of 2,216 records, representing a 99% data retention rate.
    d. Presented findings through compelling visualizations such as bar plots, box plots, and violin plots, effectively communicating complex information and facilitating data-driven decision-making for the superstore.

5. Accelerometer Data Analysis
    a. Successfully executed a comprehensive data analysis project on accelerometer data, processing and visualizing a dataset comprising over 10,000 data points, showcasing expertise in data exploration, manipulation, and visualization techniques.
    b. Leveraged powerful Python libraries such as Pandas, Plotly, and Matplotlib to analyze and visualize acceleration data trends, uncovering valuable insights and patterns in X, Y, and Z-axis acceleration measurements, enabling data-driven decision-making and informed optimizations.
    c. Demonstrated exceptional proficiency in data preprocessing and transformation by cleaning and aggregating raw accelerometer data,

calculating the magnitude of acceleration, and effectively transforming time-series data into meaningful visual representations, enabling a holistic understanding of acceleration patterns and trends.

6. Demand and Supply Analysis
    a. Successfully executed an in-depth data analysis project on ride-sharing data, examining a dataset encompassing ride demand, driver supply, and completed rides, demonstrating expertise in data exploration, visualization, and statistical analysis.

    b. Leveraged advanced Python libraries such as Pandas, Plotly, and Matplotlib to uncover key insights and trends in ride demand and driver supply dynamics, employing robust visualizations, including scatter plots with trendlines, to effectively showcase the relationship between drivers' activity and riders' demand.
    c. Demonstrated exceptional analytical skills by calculating the elasticity of demand with respect to the number of active drivers per hour, revealing a significant elasticity value of 0.82, providing actionable insights to optimize the ride-sharing platform's driver allocation and meet fluctuating customer demands effectively.

7. Store Sales and Profit Analysis
    a. Completed a data analysis project on the "Sample - Superstore" dataset, leveraging Python libraries like Pandas and Plotly to analyze sales data, identify trends, and create interactive visualizations.
    b. Demonstrated expertise in data cleaning and preprocessing, converting date formats, handling missing values, and ensuring reliable insights for decision-making.
    c. Presented findings through captivating visualizations, including line charts for monthly sales analysis, pie charts for category sales distribution, and bar charts for sub-category sales and profit analysis.