

Task for NASDAQ Stock Symbols(symbols_valid_meta.csv)

Data Analysis:

- Count the number of unique stocks listed on NASDAQ.
- Determine the distribution of stocks across different listing exchanges.
- Identify the number of ETFs (Exchange-Traded Funds) in the dataset.

Visualization:

- Create a bar chart to show the number of stocks listed on each exchange.
- Create a pie chart to visualize the distribution of stocks across different market categories.
- Generate a scatter plot to show the relationship between round lot size and stock symbols.

Advanced Analysis:

- Analyze the proportion of stocks that are ETFs vs. non-ETFs.
- Identify the top 10 companies with the largest round lot size.
- Generate a correlation matrix to explore relationships between numerical columns.

Task for NASDAQ(a.csv)

Basic Data Analysis

- Calculate summary statistics for each numerical column.
- Calculate daily returns.

Visualization

- Plot the stock price over time.
- Plot the moving averages.
- Plot the volatility.

Interactive Dashboard with Streamlit ob above Data Analysis

- Develop an interactive dashboard to display the analysis and visualizations.
- Implement interactive elements like date pickers, dropdowns, and sliders to enhance user experience.