**Introduction**

Taking a closer look at the traded price preformance of NFLX since its IPO in May of 2002 through April of 2024.

Also, making comparisons to the overall market by looking at the performance of SPY during the same period.

**Dataset Examination and Profiling**

Both of the tables used in this analysis had a similar format and consisted of columns showing daily trading data for Date, Open, High, Low, Close, and Volume. The SPY table contained additional columns parsing out date functions but were not used for the purposes of this project.

The schemas were checked for both tables and it was found that during the import process the datatypes for all columns in the NFLX table were set to varchar (50). The columns in the SPY table were imported using the proper datatypes and did not require adjustment.

While calculating descriptive statistics of both tables they were found to have the same start and end dates, as well as the same number of rows. This verified the accuracy of the data being used.

Both tables were checked for any NULL values, and none were found.

Both tables were checked for duplicate rows based on the ‘Date’ column, and none were found.

**Cleaning and Manipulation of the Data**

The name of the NFLX table was changed from ‘nflx\_stock\_price’ to simply ‘nflx’ to match the naming convention of the ‘spy’ table.

The columns in the NFLX table schema were adjusted to their proper datatypes.

The ‘Adj Close’ column in the NFLX table was found to be identical with the ‘Close’ column and was removed from the table so as not to cause confusion.

**Analysis and Discussion**

The dates included in the comparison were standardized to ensure that the same period was being considered for each table. Specifically, between May 23, 2002 (the IPO for NFLX), and April 30, 2024 (the limit of the dataset available for SPY).

Some general exploratory data analysis was done by calculating summary statistics. Both tables were examined while finding values for the averages of opening and closing prices over the trading life of NFLX, as well as the minimum and maximum values of highs and lows.

The 30-, 50-, and 200-day moving averages were calculated.

The running historical volatility was calculated using a 30-day timeframe.

The yearly percentage return was calculated for each year since the NFLX IPO. A point to note is that both the years 2002 and 2024 returns were based on incomplete periods.

* You could expand the analysis by examining the investment value and return over different time periods to provide a more comprehensive picture of NFLX's historical performance.

To assess the long-term performance of NFLX stock, the potential return was analyzed using a hypothetical $100 investment made on the IPO date, May 23, 2002.

The results showed that a $100 investment in NFLX on May 23, 2002, would be worth approximately $54,056.70 today (split adjusted), representing a significant gain of over 53,957%. This demonstrates the substantial long-term growth of NFLX stock over the past 22 years.

The same calculations were made using data from SPY as well as the same starting date of May 23, 2002, and a hypothetical investment of $100 and was found to be worth $690.30 today. This represents a 590% appreciation in value.

**Additional Considerations:**

It's important to note that past performance is not indicative of future results. NFLX has seen a historical rise in value that most likely will not be repeated any time soon barring a drastic shift in market conditions and a massive show of business flexibility on behalf of the company’s management to efficiently leverage new and existing revenue streams.

**Recommendations and Possible Further Actions Based on Analysis**