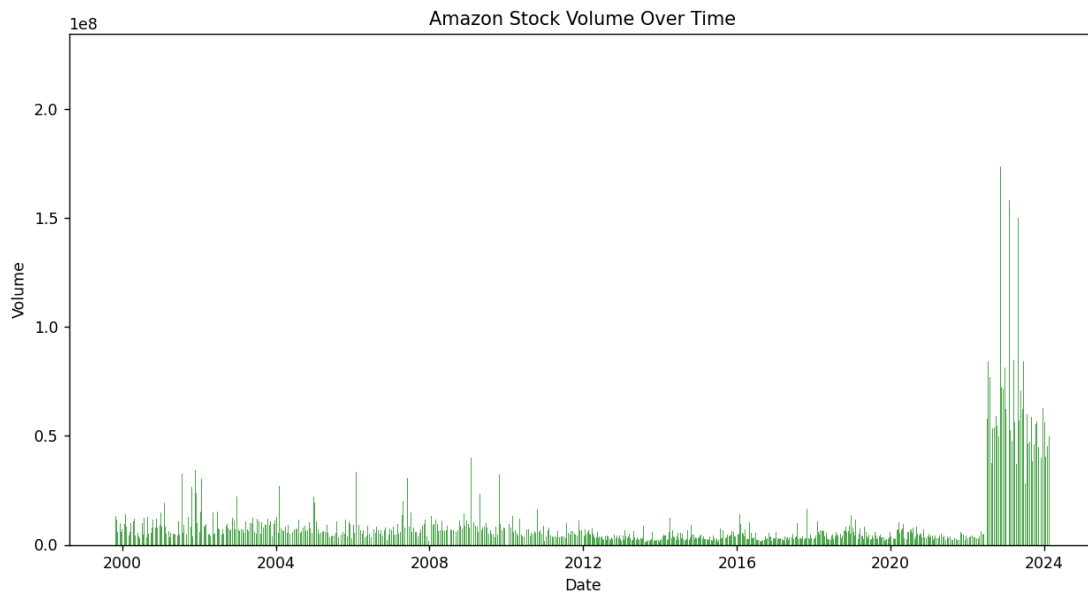
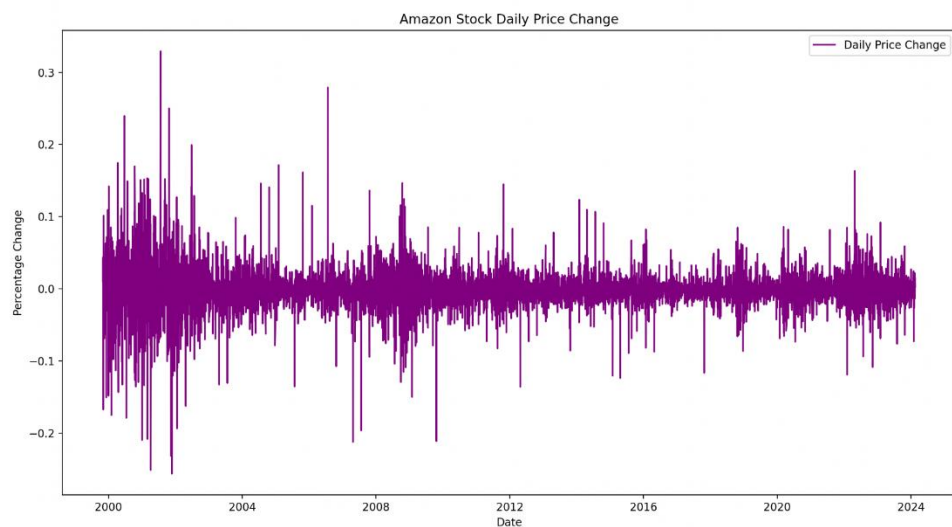




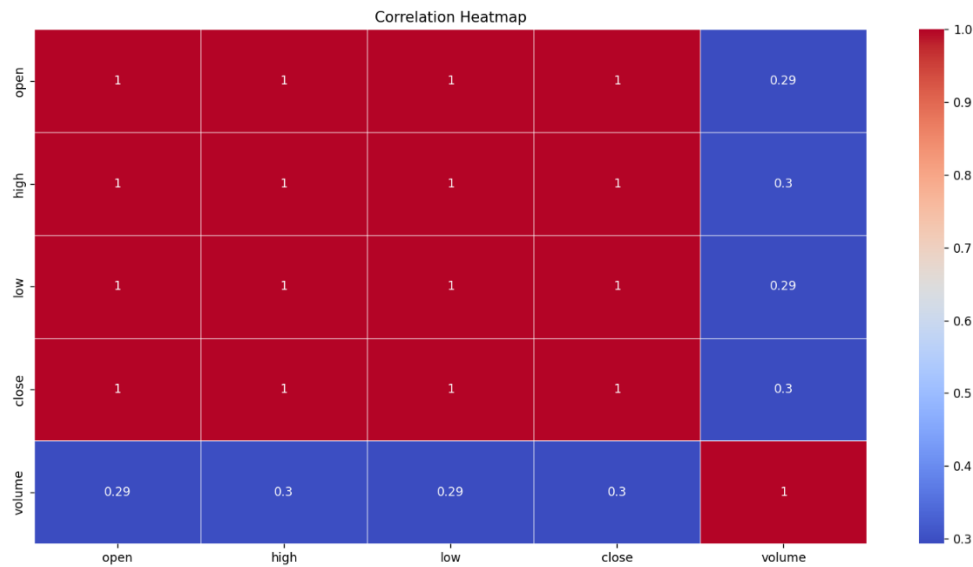
The provided plot displays the closing prices of Amazon stock over time, accompanied by a 30-day moving average. The x-axis represents dates, and the y axis represents closing prices in USD. The blue line represents the actual closing prices, showing the day-to-day fluctuations in Amazon's stock price. The red line represents the 30-day moving average, providing a smoothed trend line to help identify the overarching direction of the stock prices. Periods of increased volatility can be observed in the closing prices, indicating potential market events or changes in investor sentiment. The 30-day moving average helps smooth out short-term fluctuations, making it easier to identify longer-term trends. Instances where the blue line crosses above or below the red line may indicate potential shifts in the stock's trend. An upward crossover (blue above red) may suggest a bullish trend, while a downward crossover (blue below red) may suggest a bearish trend.



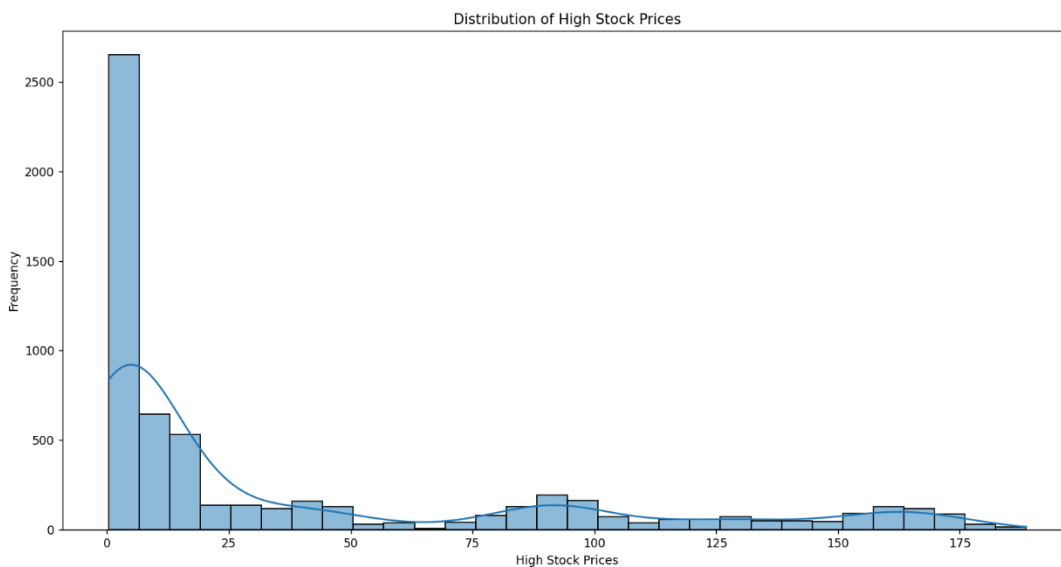
The provided plot displays the trading volume of Amazon stock over time. Each bar represents the volume of shares traded on a specific date. The sudden increases in trading volume as you can see from 2020 – 2024 is associated with the stock split. Since the stocks are 20 times cheaper, there's more volume being moved. It could be associated with significant market events, earnings announcements, or news releases.



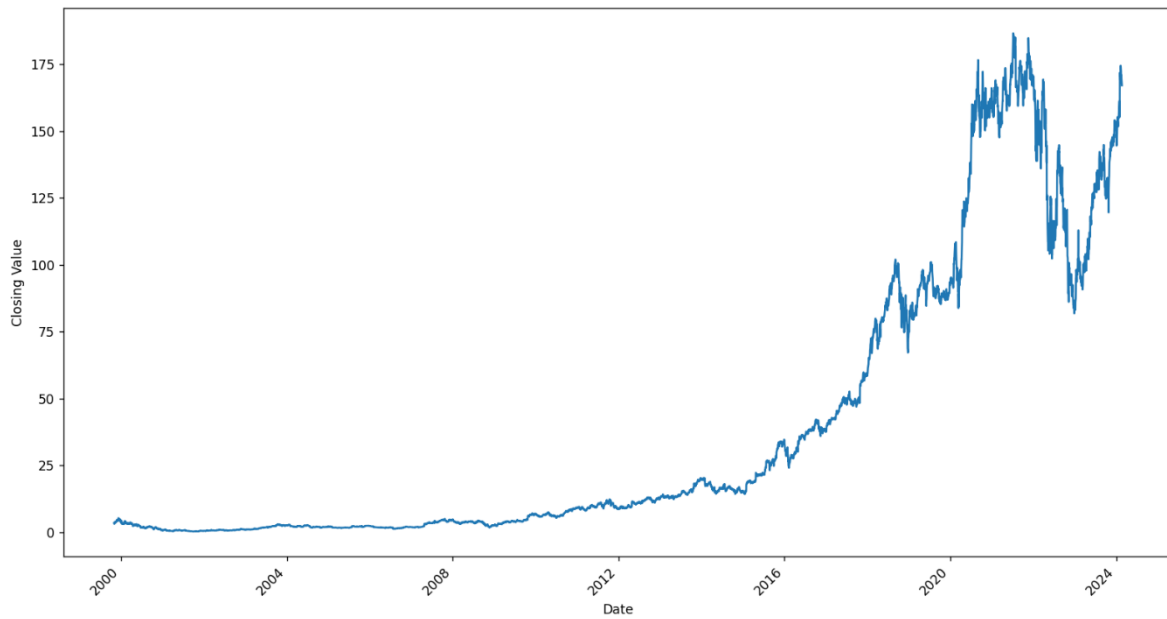
The provided plot displays the daily percentage change in Amazon stock closing prices. The line graph represents the percentage change on the y-axis and dates on the x-axis. Positive values on the y-axis represent days with an increase in closing prices, while negative values indicate days with a decrease. Changes in direction can be indicative of shifts in market sentiment or external factors affecting stock prices.



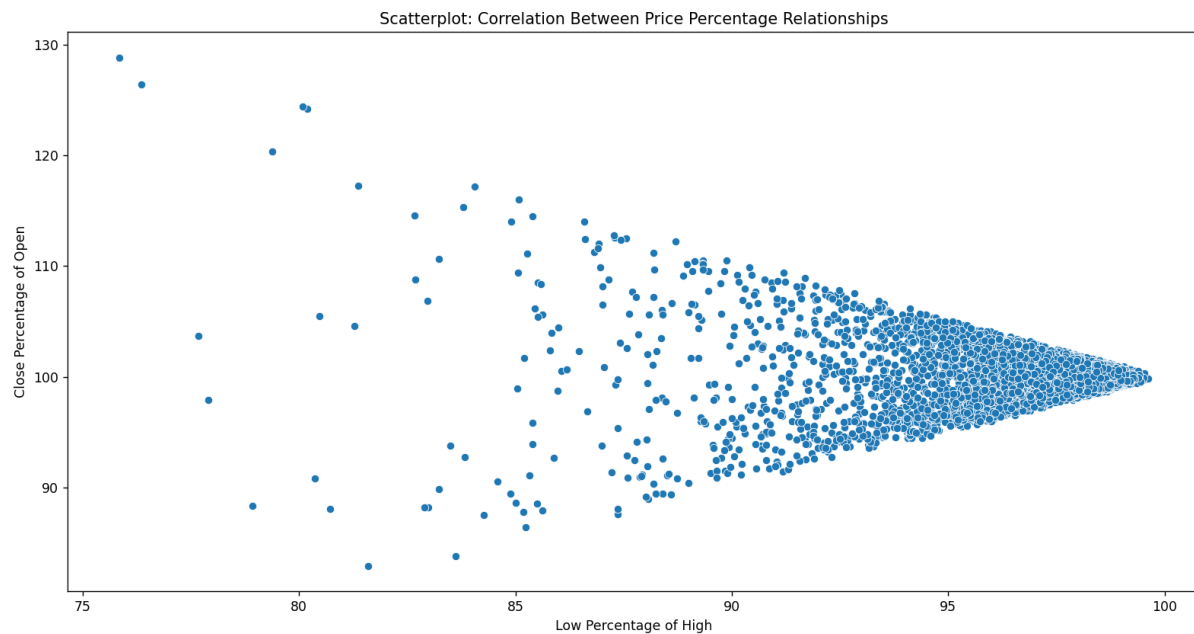
The provided plot displays a heatmap representing the correlation matrix of selected features (open, high, low, close, and volume). The x and y-axes represent the features, and the color intensity indicates the strength and direction of the correlation. Positive values (closer to 1) indicate a positive correlation, suggesting that when one feature increases, the other tends to increase as well. Negative values (closer to -1) indicate a negative correlation, suggesting an inverse relationship between features. Values close to 0 suggest a weak or no linear correlation.



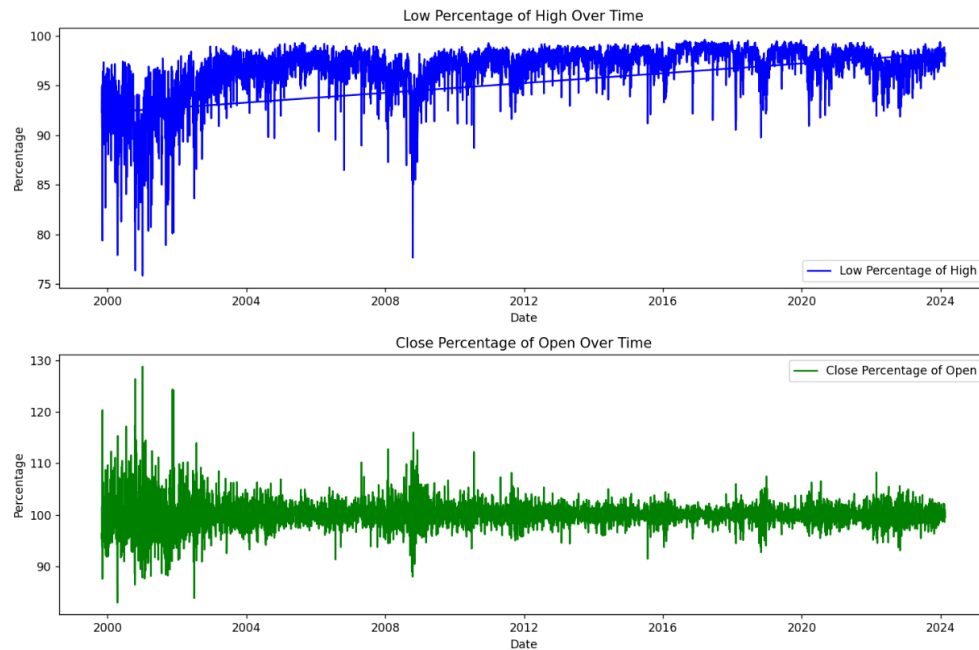
The provided plot is a histogram representing the distribution of high stock prices. The x-axis represents the high stock prices, and the y-axis represents the frequency of occurrences. Additionally, a kernel density estimate (KDE) curve is overlaid on the histogram for a smooth representation of the distribution. In conclusion, Amazon spent a long time at a low price and had properly started growing relatively recently.



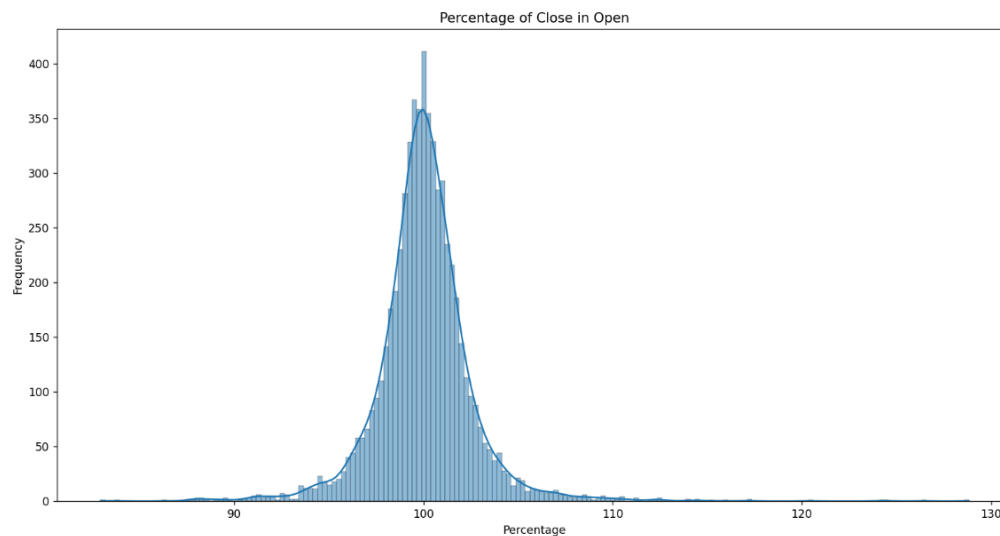
The provided plot is a line plot displaying the time series of Amazon's closing values. Each point on the line corresponds to a specific date, providing a continuous representation of the stock's closing price movements. Upward trends may indicate periods of growth, while downward trends may suggest declines.



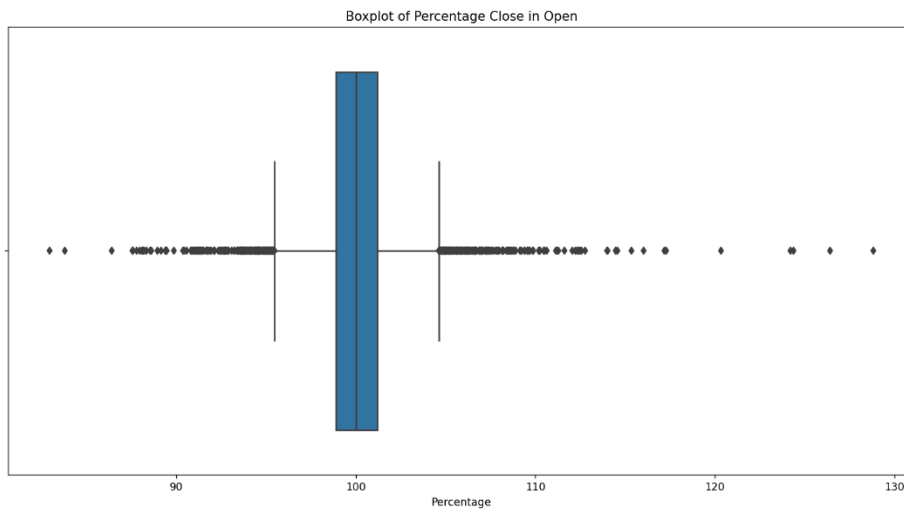
The provided plot is a scatterplot displaying the relationship between the percentage of low prices relative to high prices (Low_Percentage_of_High) on the x-axis and the percentage of close prices relative to open prices (Close_Percentage_of_Open) on the y-axis. If points tend to cluster or form a linear trend, it suggests a potential correlation. This means that when one axis is 100% the other is also likely to be 100%. This concludes that the percentage of close in open and percentage or low in high are directly related.



The provided plots include two line graphs. The first graph represents the percentage of low prices relative to high prices over time, and the second graph represents the percentage of close prices relative to open prices. Both graphs use time (dates) on the x-axis and percentage values on the y-axis.



The objective of this analysis is to calculate the average percentage difference between close and open prices for Amazon stock and visualize the distribution of these percentage differences using a histogram. The average percentage difference is then calculated by taking the mean of the percentage differences across all dates. The provided histogram displays the distribution of percentage differences between close and open prices. The x-axis represents the percentage difference, and the y-axis represents the frequency of occurrences. The average percentage difference provides an overall measure of how much the closing prices deviate from the opening prices on average.



The objective of this analysis is to calculate the standard deviation of the percentage difference between close and open prices for Amazon stock and visualize the distribution through a boxplot. The standard deviation of the percentage difference is calculated to measure the dispersion or variability of these differences across all dates. The standard deviation quantifies how much individual percentage differences deviate from the average percentage difference. The box represents the interquartile range (IQR), and the whiskers extend to the data points within a certain range. Outliers are depicted as individual points beyond the whiskers. The standard deviation provides a measure of how spread out the percentage differences are from the average. Higher standard deviation suggests greater variability in percentage differences.