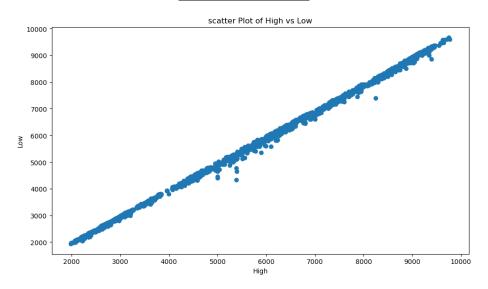
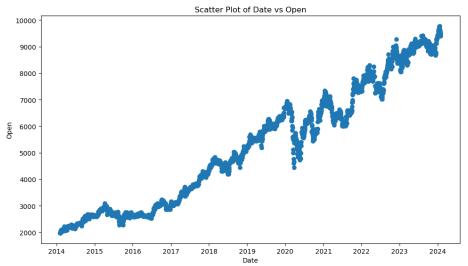
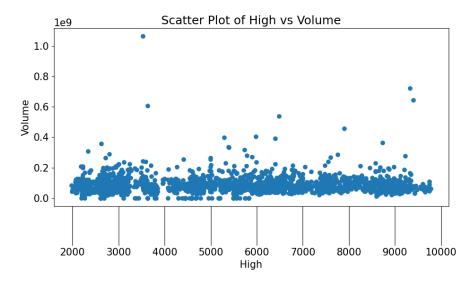
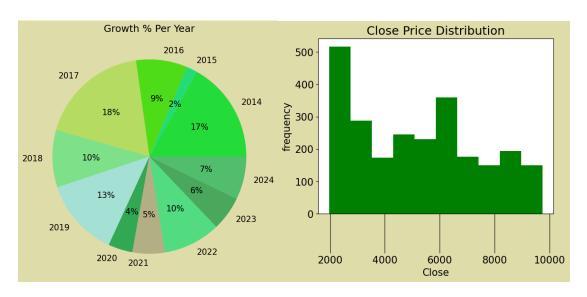
## **Bank Stock Analysis**









The data used for this analysis contains stock measures from 2014-2024 to determine the reliability of an investment in PT Bank of Central Aisa. Assuming my boss wanted this analysis to confirm an investment for a client, the above tables break down the returns and volume of this specific stock. I was able to determine an average return over the past 11 years of approximately 7.35%, which is good in most cases, but you should always try to align investments with what your client is searching for. The first scatter plot shows the relation between the stock's daily peaks and the stock's daily lows. You can see where there are a few data points that dip below the linear path. It would be wise to match public news of the company and political news with the dates these instances occur to see what may have caused these drops in stock prices to avoid them in the future. Next, I plotted the returns of the stock over time so you can visually see the growth of the stock over time. As you can see this stock has had a great track record for the past 11 years. I would again encourage research on the current events of peaks and drops in this graph to manage wealth invested in this stock better in the future. The last scatter plat was used to see if there is a correlation between the volume of the stock and the date. If there was a strong correlation between volume and the height of the stock. This method could help detect if there are single investors controlling the price on this stock which could be dangerous, however there is a spread-out distribution which tells me this stock is safe from stock price manipulation. Next, I have graphed out a pie chart to show which years were most profitable, which is always good information to keep in your back pocket when making an investment. Market research could always be applied to this pie chart to track events with growth and loss. Lastly, I made a histogram to track how long the stock stayed at each price. As expected, in a consistent growth stock this chart is skewed right, however any inconsistencies such as a dip in frequency at the \$4000 could mean several different things which should require more data to see why. My assessment of this investment from the graphs above is that it is safe, has a good track record and would be a low-risk investment with steady growth.

GitHub: <a href="https://github.com/Kcaleb4/MP2">https://github.com/Kcaleb4/MP2</a>