**Lab 9:**

**GME\_data\_1: (GME\_ClosingPrice)** I made df (data frame) equal to my file, and I opened the file to read. I used plt.plot to plot all my values for the Date and Close. I rescaled my x ticks from dates to months (2020-12-01 🡪 Dec). Then I made my title “Closing Value of GME” and plt.show to show my graph.

**GME\_data\_2: (GME\_Volume)** I made df (data frame) equal to my file, opened the file to read. Then I plotted the date (x-coordinate) through rows 40 to 78 (Jan – Feb) and for the y – coordinate I plotted the volume through rows 40 to 78 (Jan – Feb). The title is “Trading Volume”. Then, plt.show to show the graph.

**GME\_data\_3: (GME\_Volatility)** First I opened the graph to read with pandas. I made a list for the months (m = “Dec”, “Jan”, “Feb”, …). Then I made vol\_ls equal to []. I made a for loop for rows in m to go through the v = substring if for value in date that is in the position [0:7] equal to rows. Then I have the index equal to v.index, number\_of\_rows equal to length index so I will get the number of rows (253). I made a column for v[“Volatility”] equal to the closing mean subtracted by closing value squared. I made y equals the sum of the Volatility divided by the number of rows. I added y to vol\_ls. Y = vol\_ls. Then, I plotted the list of months for the x and y for the y. The title of the graph “GME Volatility”.

1. The y scale is usually determined by what’s being calculated or measured. Choosing to measure the Closing value on the stock rather than the Open value makes it easier to analyze the value over time. If there was a different x or y axis the GameStop graph would have a different coordinate for the graph. (The line graph would not look the same). Unless the x and y value is swapped the graph would be the same, but at a different angle.
2. How might I use other stocks to create more MatPlotLib plots from this time to present a story of what happened to GameStop?

You can look at the “Low” to see which month had the lowest value for it. Also, calculate the mean for “High” over time. (months)

1. What other ways can you think of to present this data?

The data can be presented as bar chart or a histogram.

1. Worked by myself.