My project is trying to see if there is any correlation between the cryptocurrency market and the stock market and the GDP of the country. I will do this in multiple ways, one looking at the rise and fall of the price of multiple different cryptocurrencies, another way is looking at the stock market at the same time as the cryptocurrency rises and falls to see if there is any correlation between the two.

The first major part of this is that I will look at multiple different cryptocurrencies to help create an overall view of the cryptocurrency market. The reason that I will look at different cryptocurrencies and make a view of the market is that I can control which ones are in the data, this leads to a more stable view of the market as a whole but the drawback is that the data will not show the whole market in the visualizations. I will also use the api’s that are available online to create another visualization of the market but as a whole, this is because it will give me a more accurate representation of the cryptocurrency market as a whole rather than using the two most stable ones. The reason that I will be using both the one I generate and the one that I get from the api is that it will show if the two highest priced ones have more or less correlation to the market as a whole.

The cryptocurrencies that I will be using to help form this view are bitcoin and Ethereum. The reason that I will be using these two to form my base of the cryptocurrency market is that these are the two with the most possible uses outside of trading. Another reason that I will be using these two cryptocurrencies is that they are some of the more stable cryptocurrencies in the market. The final reason that these are the two that I will be looking at is that they are the two that cost the most in terms of the USD, this could be a part of the reason if they have any correlation to the market and its activities.

In the first visualization above the data shows bitcoin prices per month going back to the beginning of the trading that was available on yahoo which is in October of 2014 and this continues until the most recent start of the month which is at this time February of 2023. The table shows the data in seven different columns each representing a different thing. The first column is the data this is the first of each month going back to October of 2014. The second column is the opening price of bitcoin on that day, this means what the price of bitcoin was at the start of trading in wall street. The third column is the high this means the highest price that it reached during the day of trading. The fourth column is the lowest price that it reached during that day of trading. The fifth column is the close price which is the price that bitcoin was at during the end of the day or when wall street closes for the day. The sixth column is the adjusted close, this column is not important. The final column is the volume, this is the amount of bitcoin that was traded during the day this column is one of the columns I will use to see if the activity in the cryptocurrency market matches the activity in the stock market.

The second part of my project is that I will be looking at the stock market rises and falls. The reason that is will be doing this is that I will look at the stock market to get a baseline to see if the cryptocurrency market has any impact on the market or any correlation between the rises and falls of ether market to one another. The way that I will be looking at the market is by taking the data form the Nasdaq, the s&p and the Dow and looking at each one separately and then taking all of them and averaging them to create a picture what the market is looking like on any particular day.

Another part is that I will take the GDP from the fed and plot it out to see if it is related to any of the cryptocurrencies that I am looking at or if it is unaffected by them. The reason that I will include the GDP in my project is that I will use it to look at the whole economy and not just the stock market or the crypto market when I review if cryptocurrencies do or do not have any impact on the market or the economy.

In the second visualization is the representation of the GDP of the country per year from 1990 to 2023. This is an important visualization because it will be part of the baseline in testing the bitcoin price that is show in the first visualization against the rise and fall of the GDP, as well as it could be useful in showing market trends that could be part of the crypto market.

To recap my project is to take the data from yahoo on bitcoin, Ethereum, the cryptocurrency market, the Nasdaq, the S&P, and the Dow. To see if the cryptocurrency market has any affect on the stock market or the GDP. I will do this by taking each cryptocurrency and placing it up against each market representative and the GDP to see if there is any correlation between them. I will also use them to create an overall view of each market and compare each one to another. The boundaries that I will use for the project will be limited to the amount of data that I can find for the project. Most likely it will be that I cannot find data for the cryptocurrency as far back as I can find for the market or the GDP of the country.