Project 1 Proposal

**Group Name:**

‘First\_project’ = True

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Project Description/ Outline:  
 Reviewing NASDAQ data for the Big 5 over the last 10 years, we want to find out which of the Big 5 are the best to invest in either short or long term and contrast their performance against the NASDAQ as a whole over the same time period.

Research Questions to Answer:

* Which of the big 5 was the best investment over the last 10 years (largest net change positive)
* Which of the big 5 was the worst investment over the last 10 years (largest net change negative)
* Most consistent of the big 5 over the last 10 years (lowest daily percent change averaged over 10 year period)
* Are there yearly events that contribute to stock volatility (identify reoccurring spikes and dips in stock prices throughout the year, major positive and negative changes)? Are these regularly reoccurring?
* Based on the potentiality of reoccurring events, is there general good times to buy and sell the big 5 throughout the calendar year?
* Did the big 5 outperform or underperform the NASDAQ composite as a whole over the 10 year period?
* Of all the shares bought in the big 5, who had the most shares bought over the last 10 years?
* What are the closing prices for the big 5 going to be on Aug 31st 2020 (LinReg)? How does the prediction compare to the actual prices they were this year?

Datasets to be Used:

https://www.kaggle.com/abdullahmu/big-five-stocks

Tasks:

* Clean Data
* Analyze Data and Build Dataframe for Analysis
* Build 10 year line graph plotting change year over year for big five + NASDAQ
* Build multiple line graphs showing open and close over 10 years for each of the big five + NASDAQ
* Build 10 year graph plotting avg change year over year for the big 5 as a whole vs the NASDAQ composite
* Build bar graph comparing % change average for 10 years
* Build Pie chart showing volume purchase of big 5 over the last 10 years
* Open vs Close daily difference candlestick chart