**Assessment 2**

**STOCK MARKET PREDICTION**

# Business problem statement:

Stock market is the largest area in the society where the buying and selling activities take place. The stock value in the market changes each day and by observing that the trading that is the buying and selling happens. The price change in the stocks can happen due to many factors such as weather changes, political consequences. When the stock market crashes many losses occur because they happen so suddenly when we don’t expect it to happen. To rectify this situation the prediction can be made to avoid these situations. By observing the historical data the situation can be assessed because the same situations occurred in the past can help us in the present and avoid the losses.

### DATA:

Data consist of 6 columns of data which is date , close/last , open, High,Low,volume ,and 113356 rows of 10 companies amazon, apple, Facebook, zygan, AMD, Starbucks ,Tesla.inc, Microsoft, Qualcomm, Cisco System. This is 5 years stock data of each company. Close/last and open price explains the price of the stocks before the end of the day and start of the next day. By analysing these columns in the data we can observe the rise and fall of stocks using the past historical data and can predict the crashes .

MODELS:

We can use Neural network ,structural support vector machine (SSVM), support vector machine (SVM) models to work on the data. We are going NLP package to simplify the text preprocessing and we can focus on using the machine learning models to use on the data.

# Outcomes assessed:

Future scope of this project will involve adding more parameters and factors like the financial ratios, multiple instances, etc. The more the parameters are taken into account more will be the accuracy. By using the machine learning models on the data, we can observe the stocks on which day and which factors are affecting the stocks and in the future we can prevent them to avoid the losses. We can predict the crashes by analysing different weather and political consequences.