

Stock Forecasting using Excel

We are going to use a simple linear regression to forecast stock price. This uses dataset from yahoo and using intel stock piece from 2016 to 2021 a 5 year.

Data set

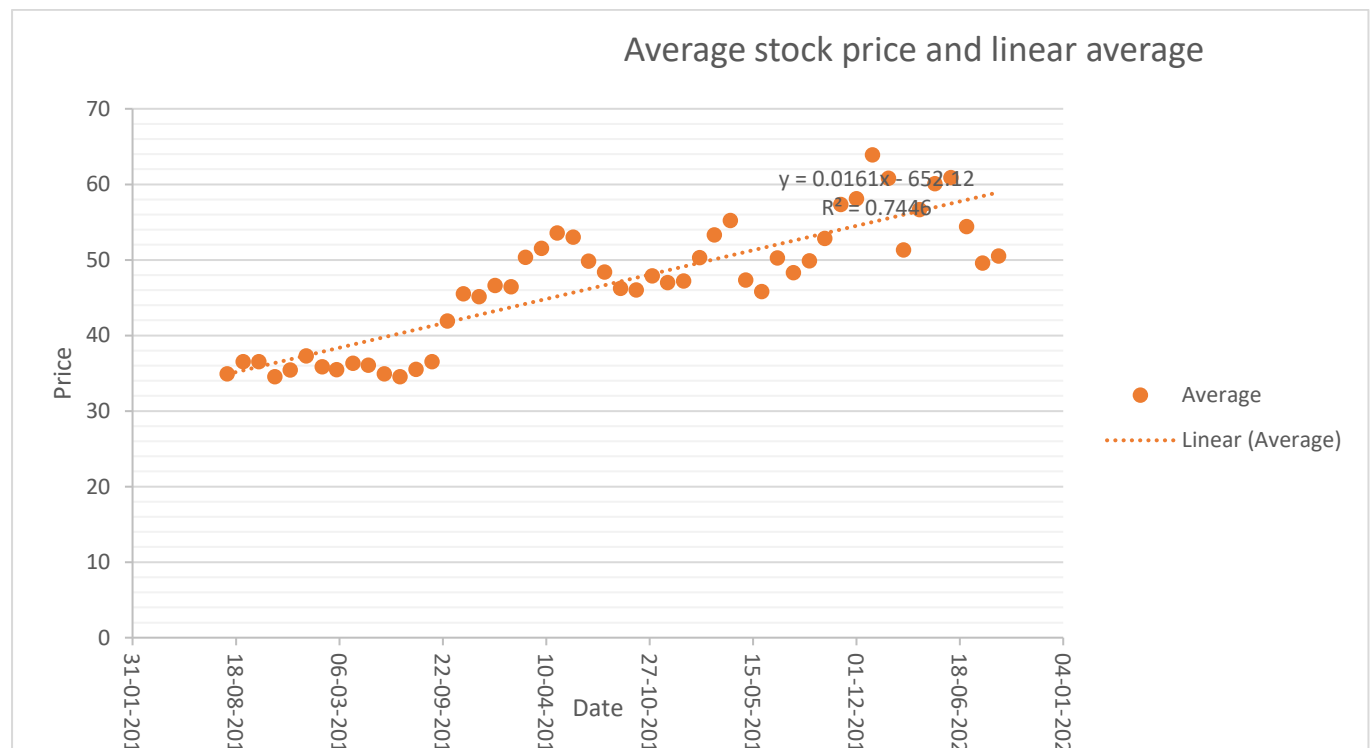
- Data set contains: - Date, Open, High, Low, Close, adjvolume, Volume
- No need to clean the data set
- stock respect to each month
- For analysis purposes we are using average price on that respective month (high and low)

Test and Train set

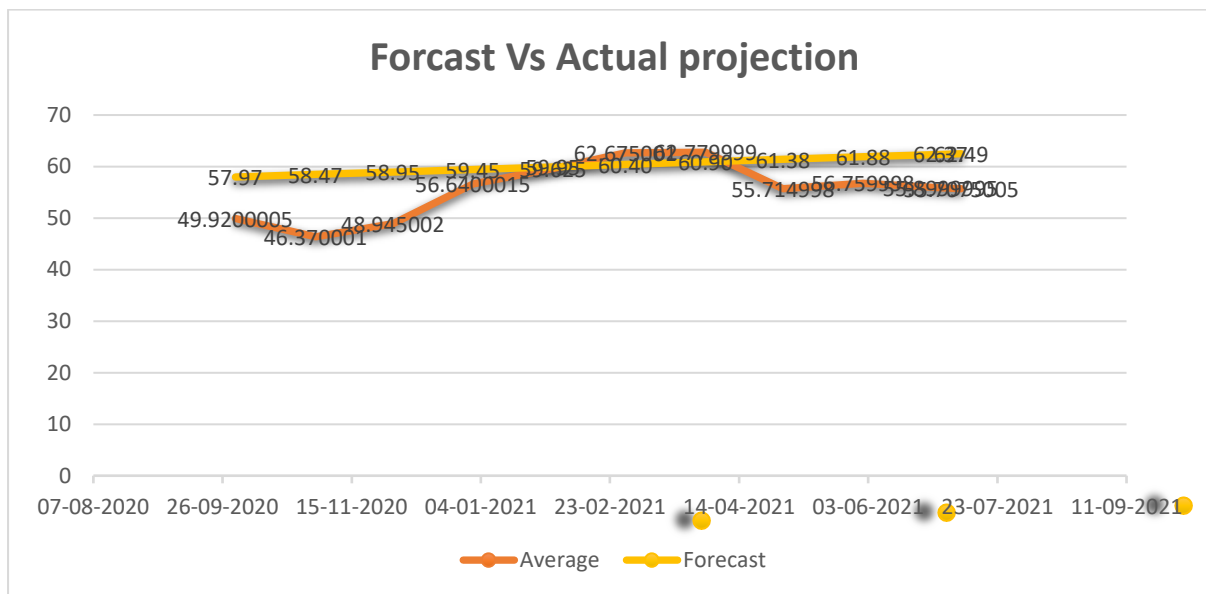
We are splitting the data set into training and testing. We have a total of 61 rows in which we are using 50 for Training and 11 for testing. After we find the trend, we will check it with testing data. We can also check the error.

Linear Average

We are using Excel function to find the linear trend. Based on the figure we can forecast the linear trend.



We find the Trent and with this we are going to forecast for the last 11 months.



From this we can see the projected average and real average.

Date	High	Average	Low	Forecast	error
01-10-2020	56.23	49.920001	43.61	57.97	-14%
01-11-2020	48.5	46.370001	44.24	58.47	-21%
01-12-2020	52.65	48.945002	45.24	58.95	-17%
01-01-2021	63.95	56.640002	49.33	59.45	-5%
01-02-2021	63.54	59.625	55.71	59.95	-1%
01-03-2021	67.44	62.675001	57.91	60.40	4%
01-04-2021	68.49	62.779999	57.07	60.90	3%
01-05-2021	58.01	55.714998	53.42	61.38	-9%
01-06-2021	58.42	56.759998	55.1	61.88	-8%
01-07-2021	57.01	55.9	54.79	62.37	-10%
09-07-2021	56.105	55.707501	55.31	62.49	-11%

We can Find the error here everything above 5% is a bad projection. So, this model is not good at predicting the future. Since linear is not true if the value jumps up and down. So, we can find so many limitations while we predict in this model.

This can only use for basic prediction in data without much variations in past and future change in the data.