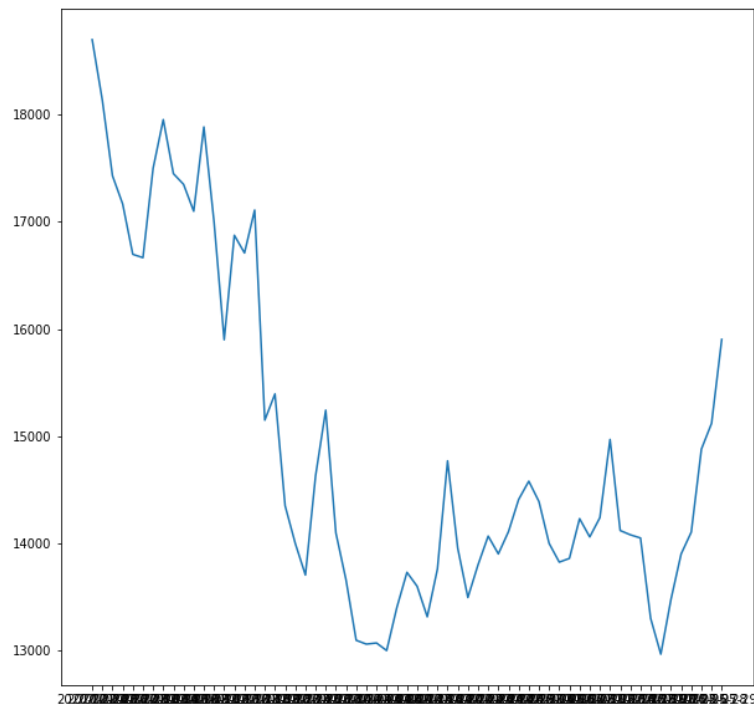


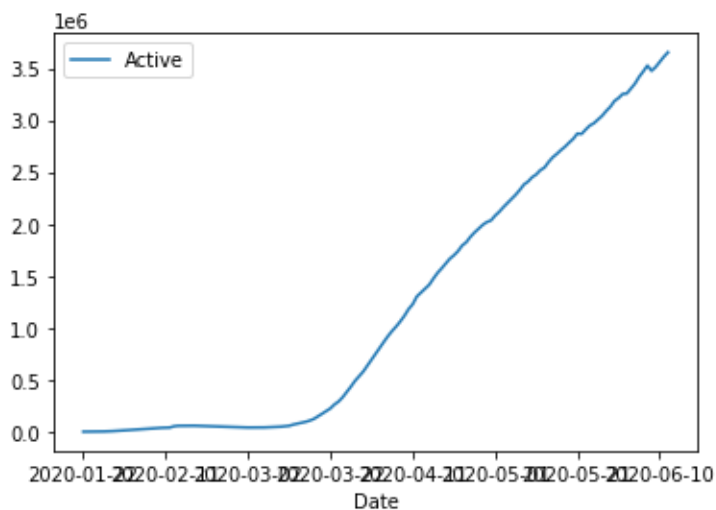
## Assignment No 5 Report (COVID19 + STOCK)

This assignment consists of computing correlation between Stock prices and COVID19 and predicting future stock prices of Eicher motors.

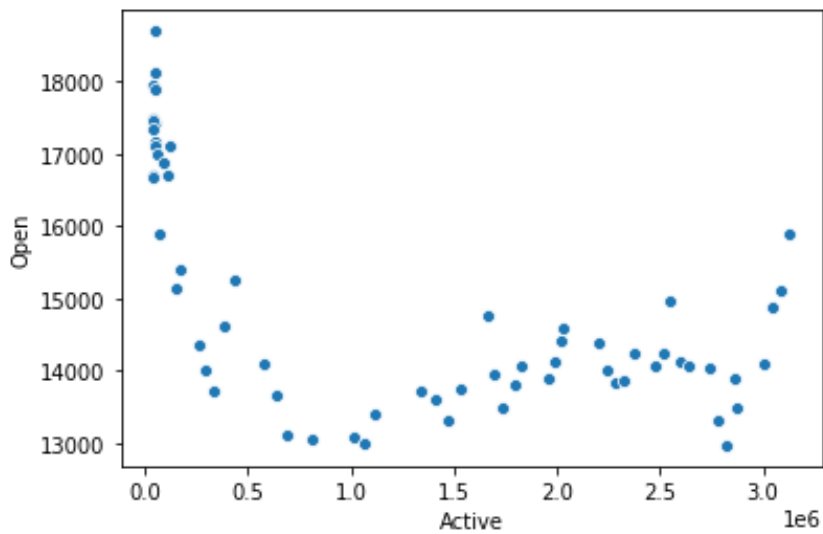
Eicher motors stock price from 22<sup>nd</sup> January 2020 to 12<sup>th</sup> June 2020:



Plot of Active corona cases in the world:

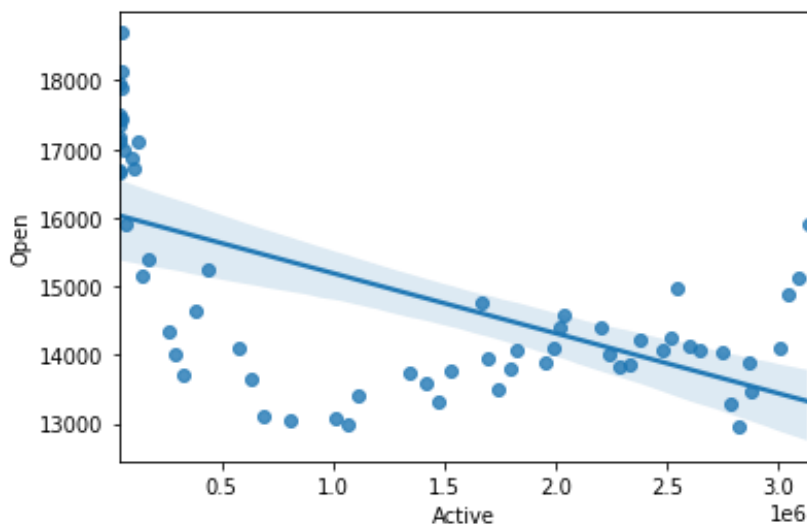


Plot of correlation between Opening values of stock price and active cases:



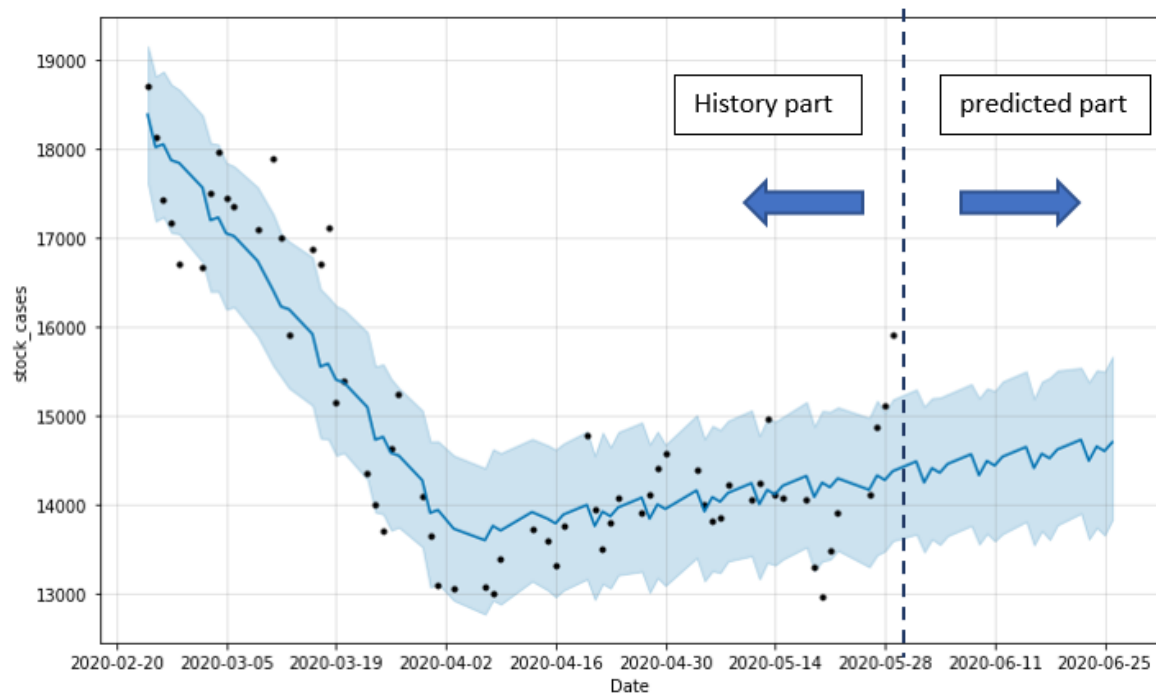
Plot of regression line on the opening values of Eicher stock and the number of active cases.

It can be observed that Opening values of the stock market and active cases **are negatively correlated**

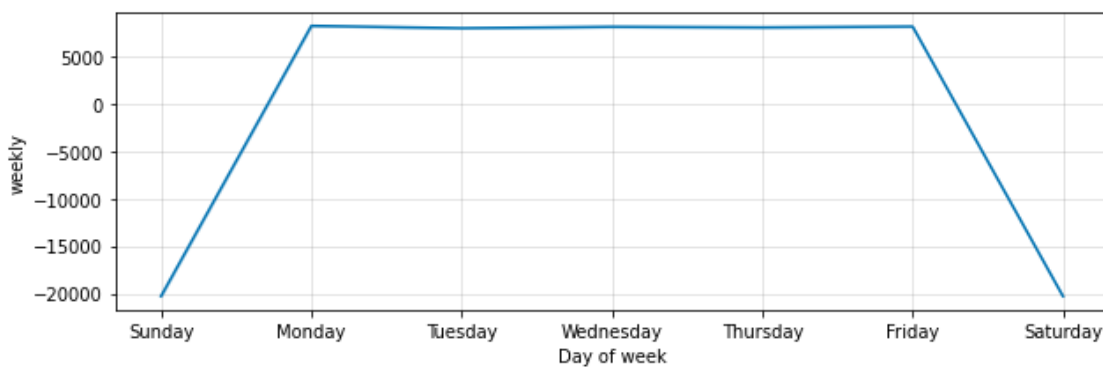
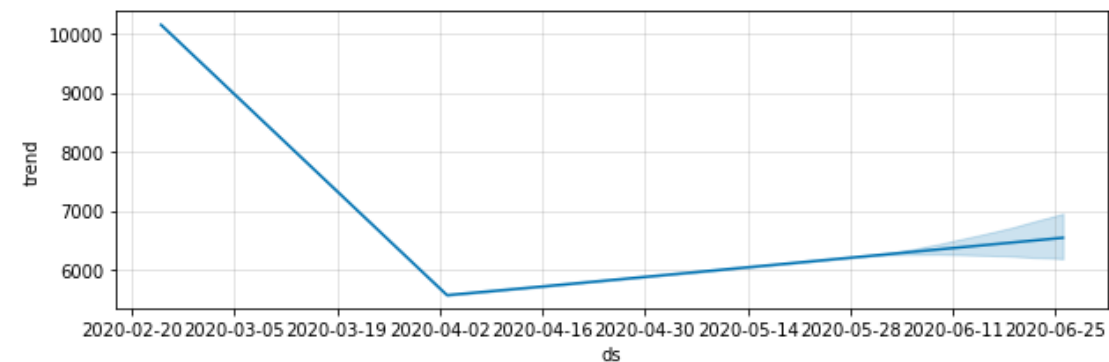


## Machine learning Prediction using Facebook prophet prediction model:

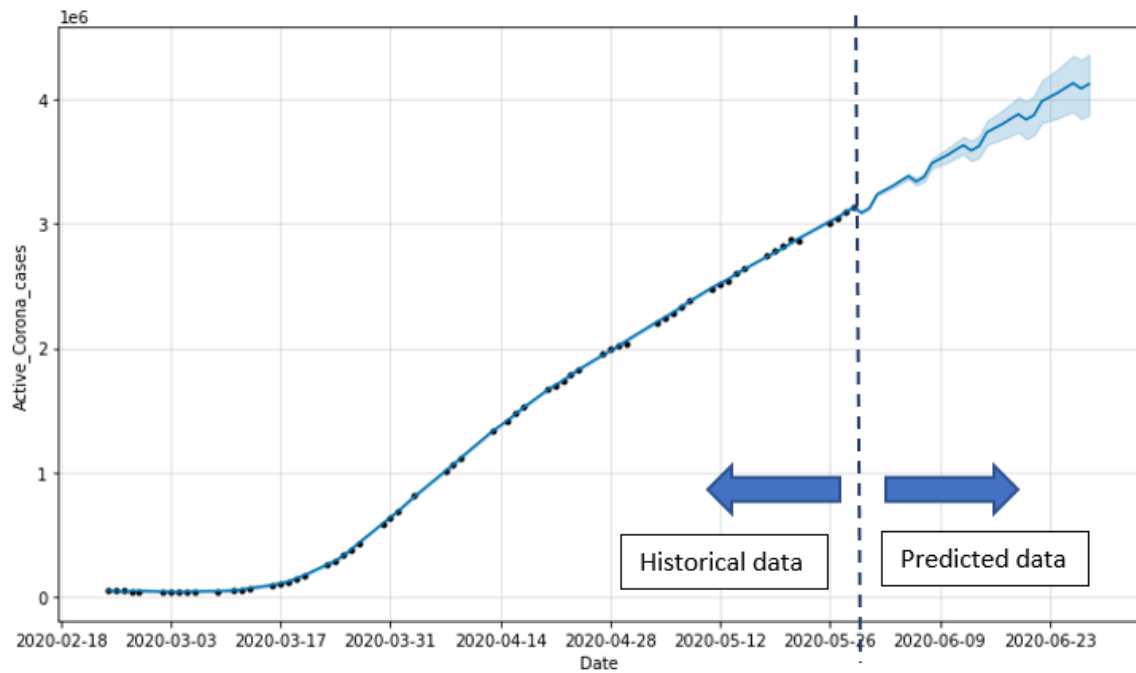
Predicted value of Eicher motors stock price is as follows:



Forecast of Trend of Eicher motors stock price:



Predict the corona cases for next 30 days



Trend of active corona cases for future 1 month and the trend per week is given below

