 With this app, we can fit an ARIMA model to the dataset having the stock prices of Google from years 2013-18 .

The app that is programmed using Rshiny, and takes inputs as follows:

1)The category of stock price to be forecasted : Opening price, closing price, etc.

2) Choice of Augmented Dickey-Fuller Test for stationarity : Actual, differenced.

3) Choice of correlation function : Auto correlation function & Partial correlation function

4) The parameters of the ARIMA model :

* **p**: The number of lag observations included in the model, also called the lag order.
* **d**: The number of times that the raw observations are differenced, also called the degree of differencing.
* **q**: The size of the moving average window, also called the order of moving average.

# I used the ARIMA model with the lag value of 7 for autoregression, a difference order of 1 to make the time series stationary, and a moving average model of 4.

5) Number of days for which forecasting is to be done

6) Choice of Forecasted values or Forecasted plot.

The results look like this:



