



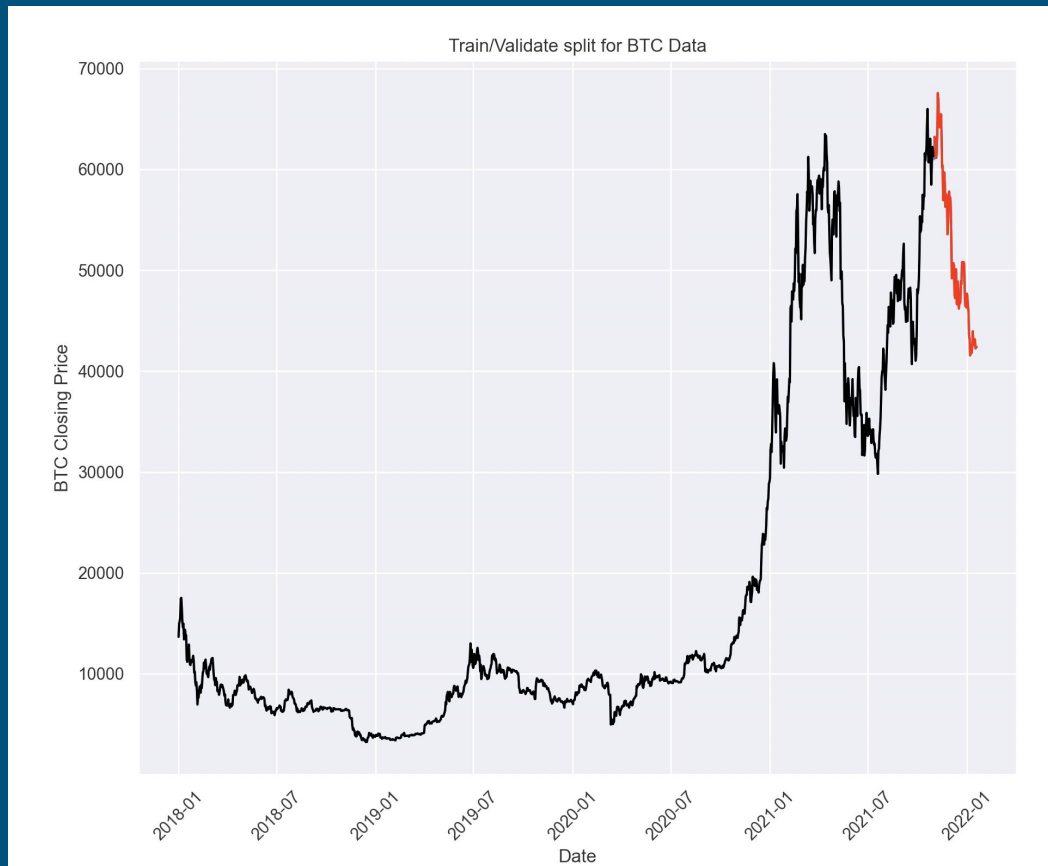
Week 2 Lab Practice OL



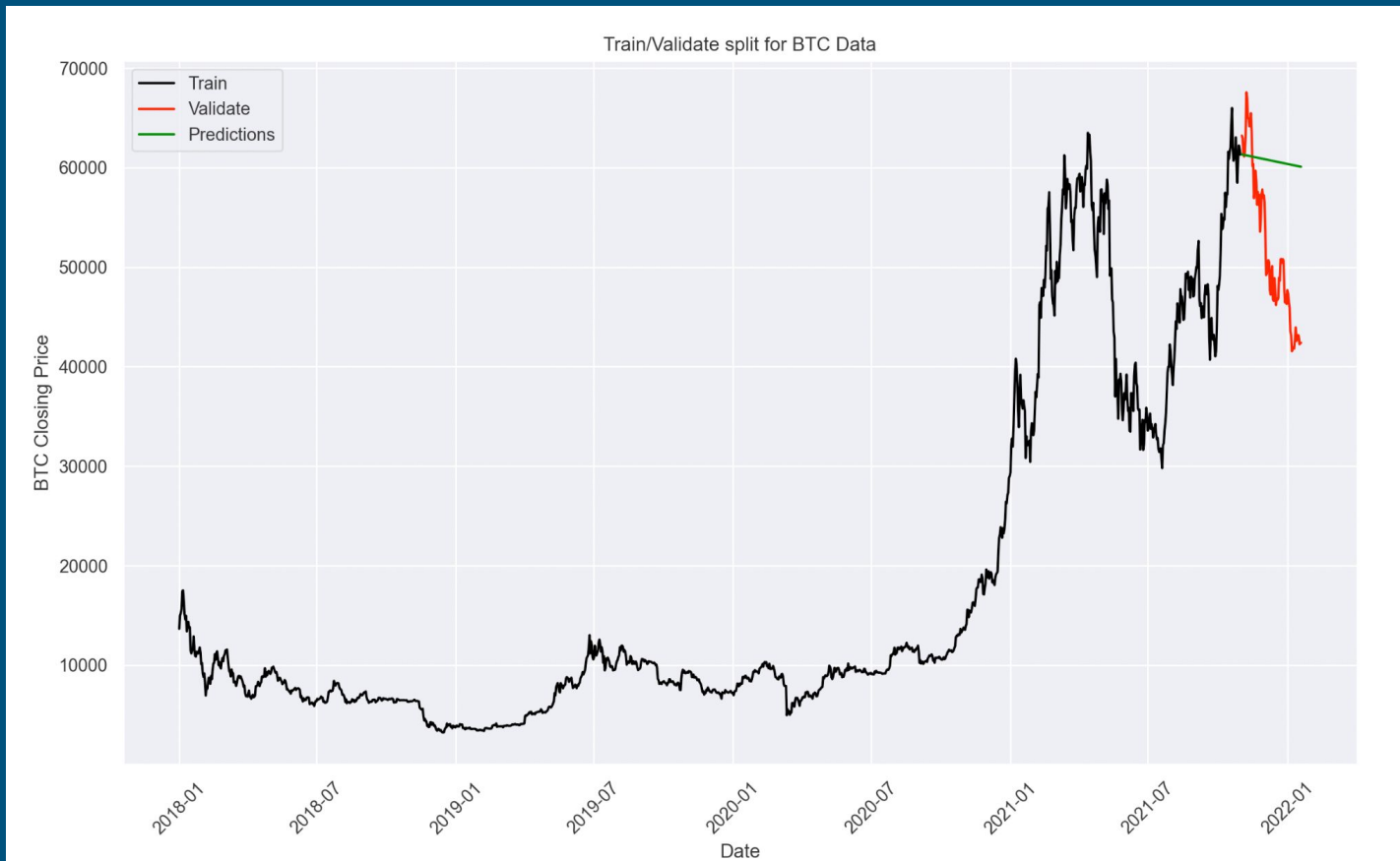
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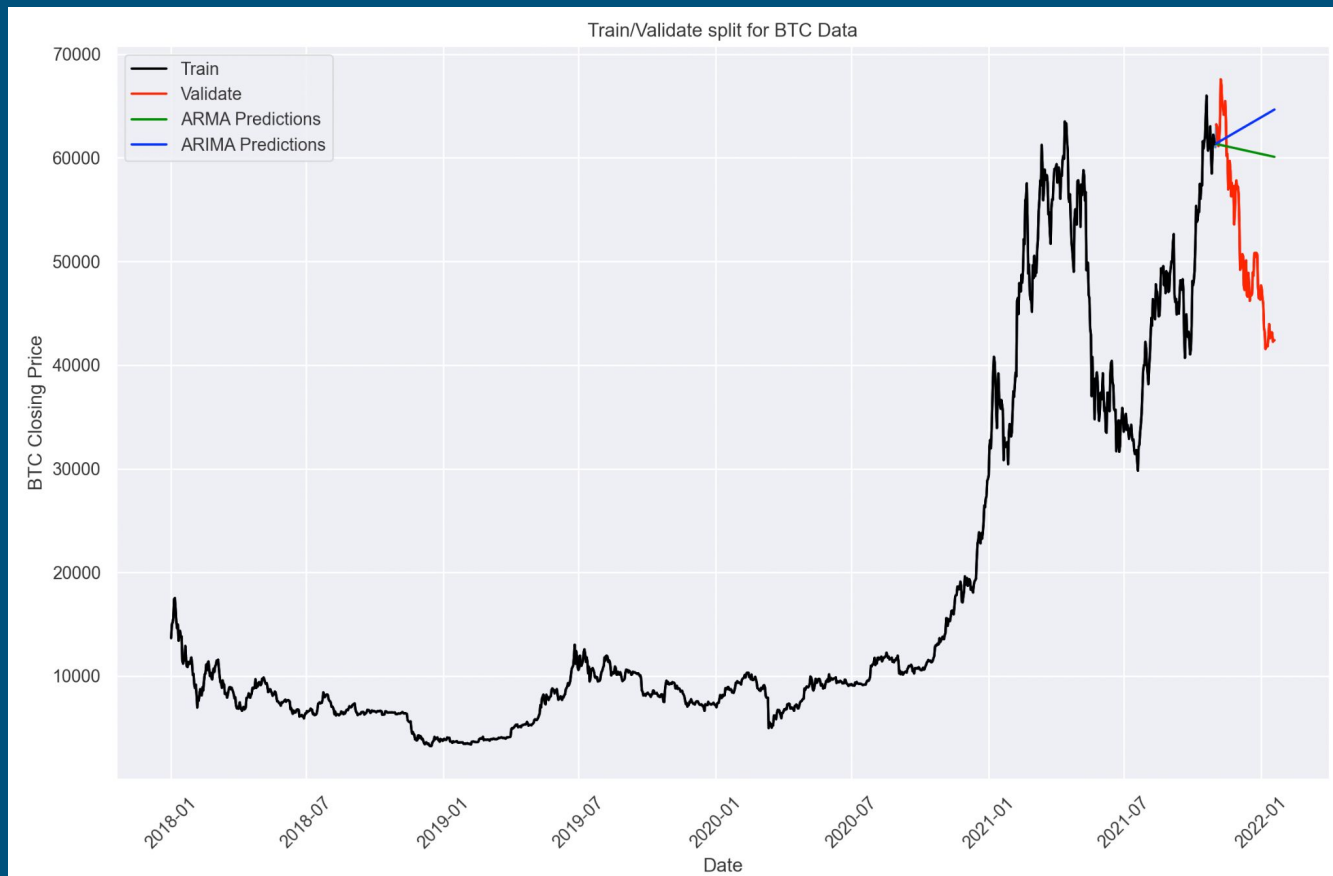
Graphs and charts created by code (I)



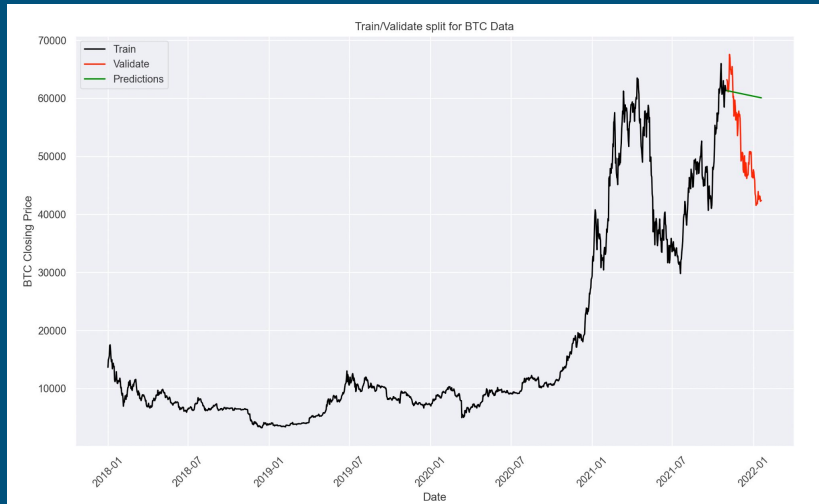
Graphs and charts created by code (II)



Graphs and charts created by code (III)

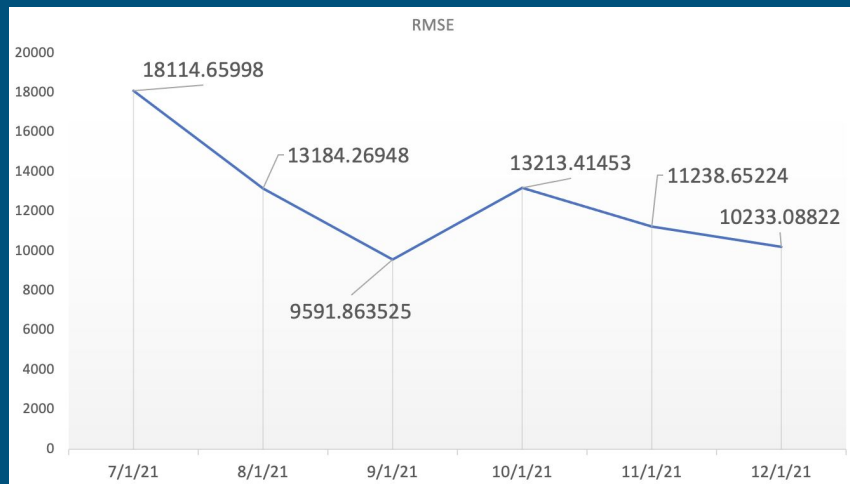


What does the plot look like with training, validation and predicted data?



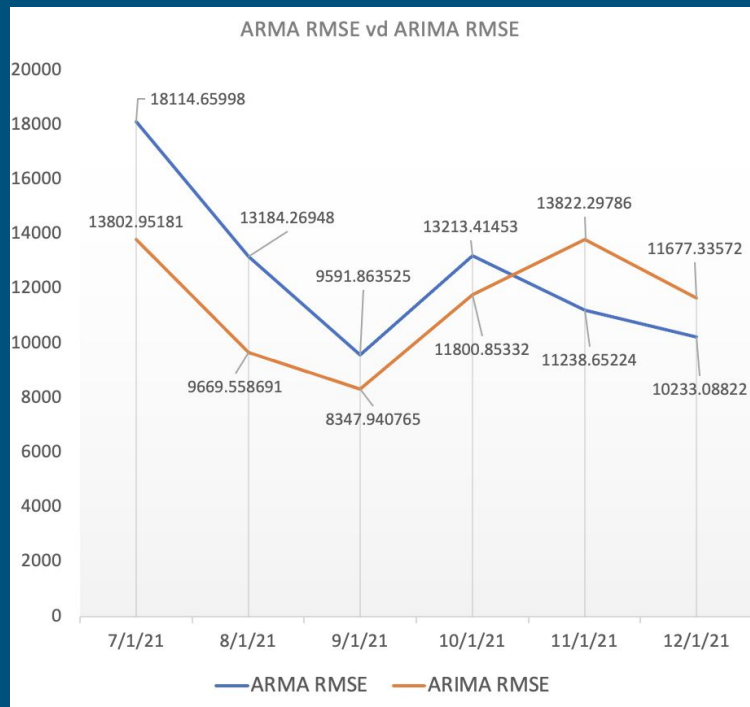
- The plot shows the BTC closing price in different colors.
- Most of the timeline is in black, which is the data used to train the model.
- The data with date greater than November 2021 is in red, it was used to validate the model.
- The Prediction (ARMA) is in green indicating a decreasing slope

Does the RMSE improve if you change the dates of the split?



- RMSE changes depending on the date of the split
- Some split dates show an improvement, like 9/1/2021, but others show an increase in RMSE like 7/1/2021

Does an ARIMA model improve over the ARMA?



- It's hard to say if ARIMA model is an improvement over ARMA.
- In a test with 6 different split dates, ARIMA certainly showed a smaller RMSE in 4 of the dates, however in the last two it was greater than ARMA RMSE.

Thank you for reading!
