

BITCOIN PREDICTION

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OBJECTIVE

To analyze the prediction rate of bitcoins by exploring the data using Time series forecasting smoothing techniques.

APPROACH

Importing the libraries

Reading and understanding the dataset

Naive method

Simple Average Method

Simple Average Method – 12 months

Simple Average Method – 6 months

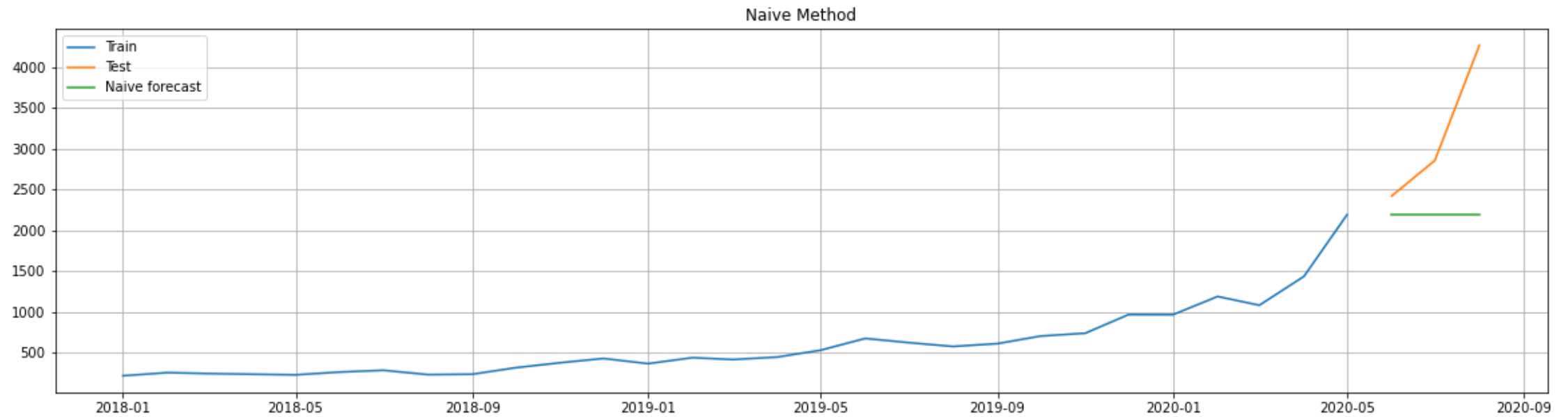
Simple Average Method – 3 months

Simple Moving Average Method

Simple Exponential Smoothing

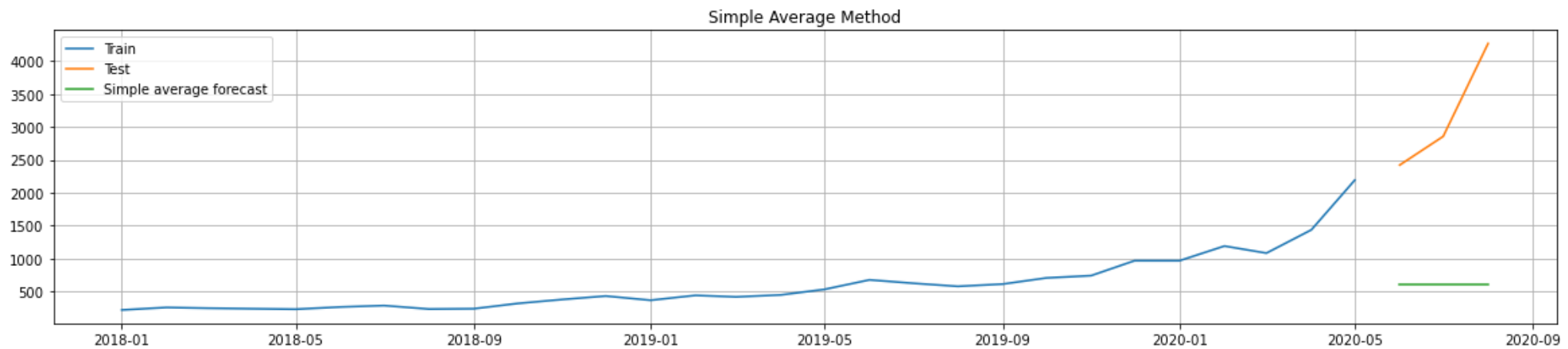
Holtz Exponential Smoothing

NAIVE METHOD



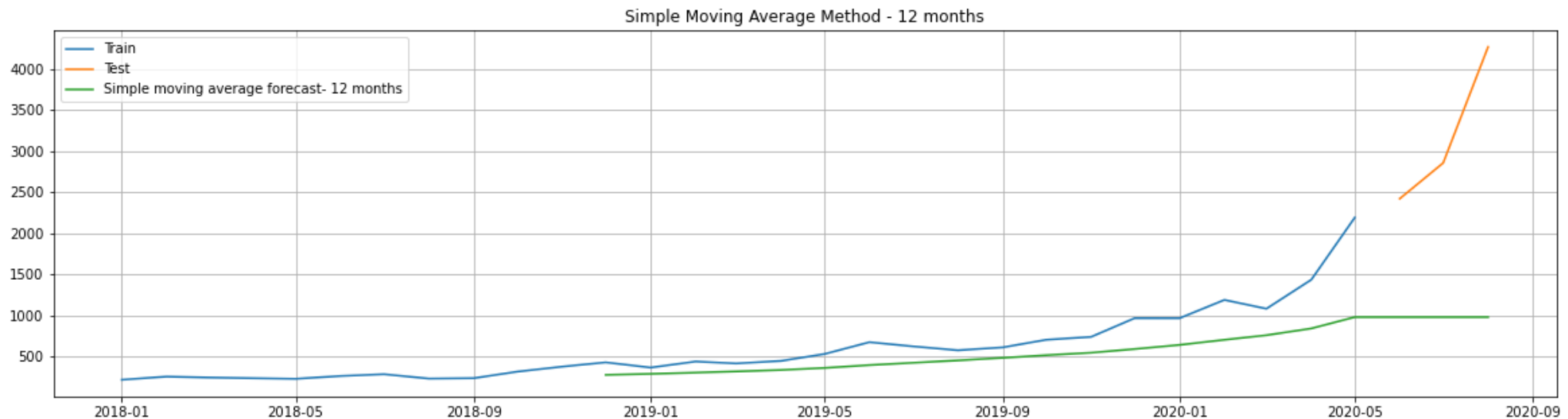
	Method	RMSE	MAPE
0	Naive method	1265.9	27.12

SIMPLE AVERAGE METHOD



	Method	RMSE	MAPE
0	Simple average method	2703.73	80.19

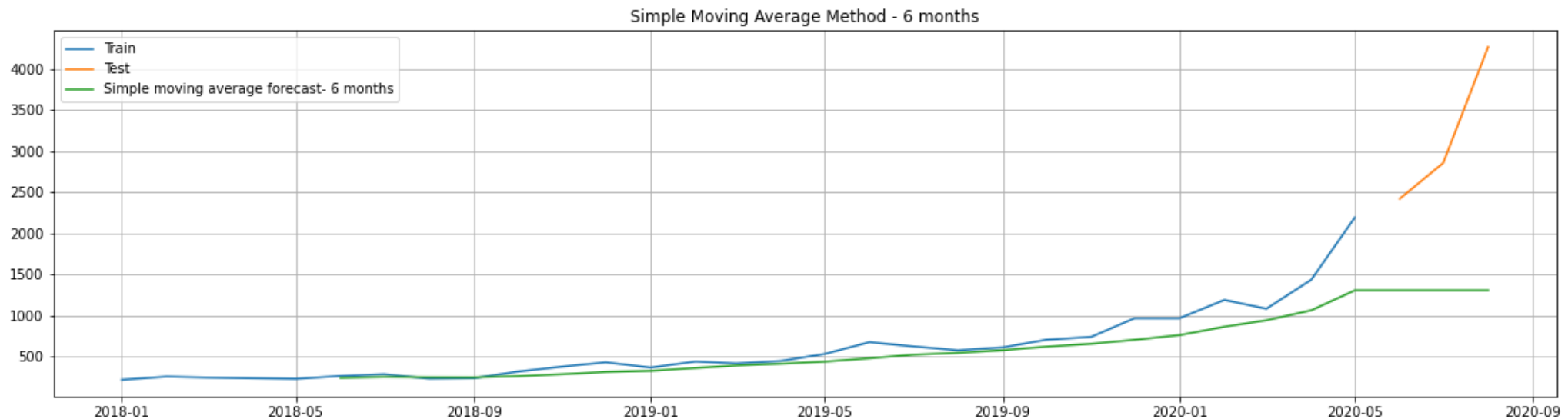
SIMPLE AVERAGE METHOD – 12 MONTHS



Method	RMSE	MAPE
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0 Simple moving average forecast-12 months	2338.94	67.42
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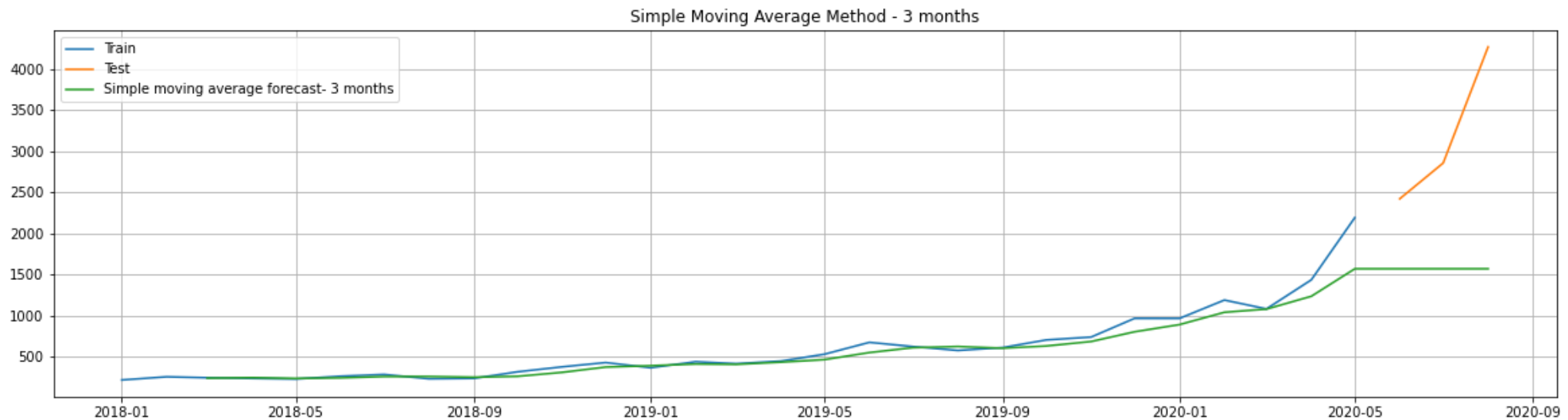
SIMPLE AVERAGE METHOD – 6 MONTHS



Method	RMSE	MAPE
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0 Simple moving average forecast-6 months	2035.79	56.61
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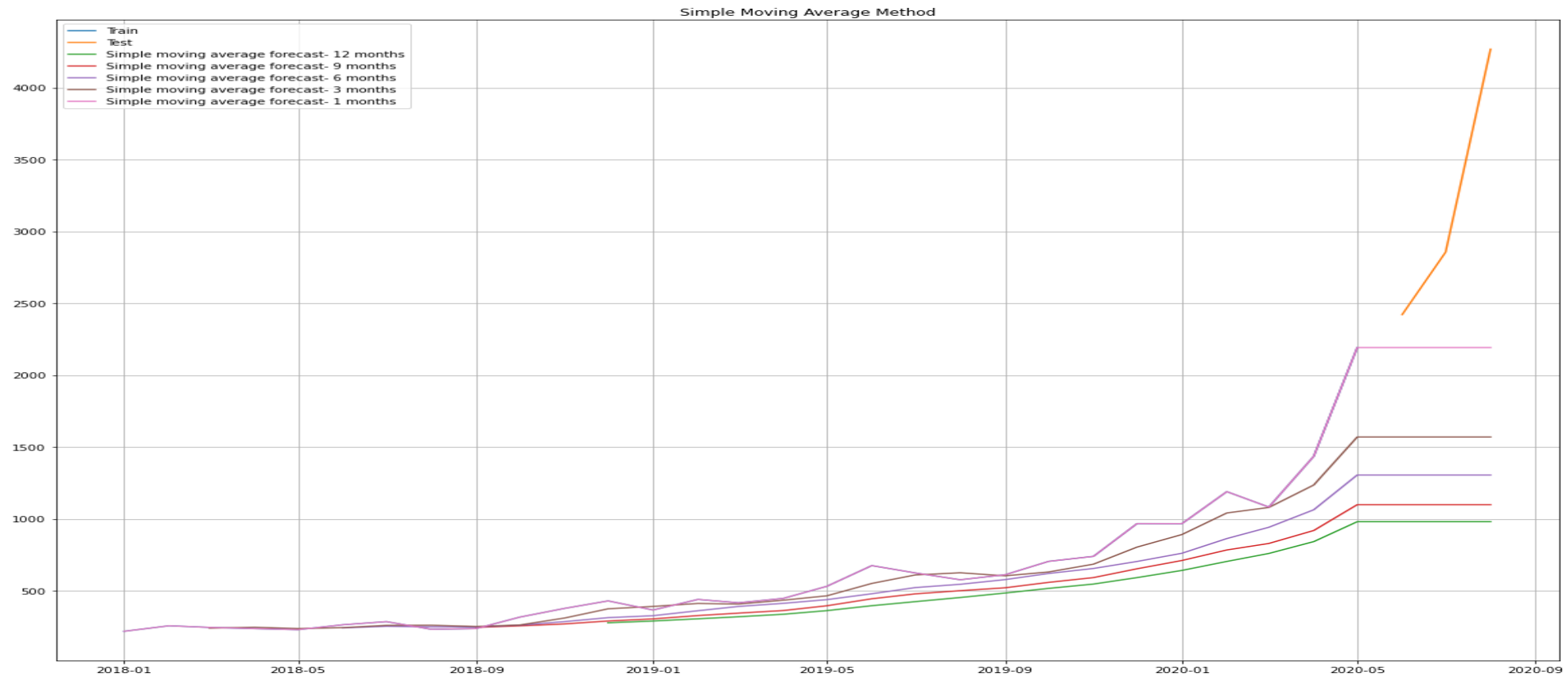
SIMPLE AVERAGE METHOD – 3 MONTHS



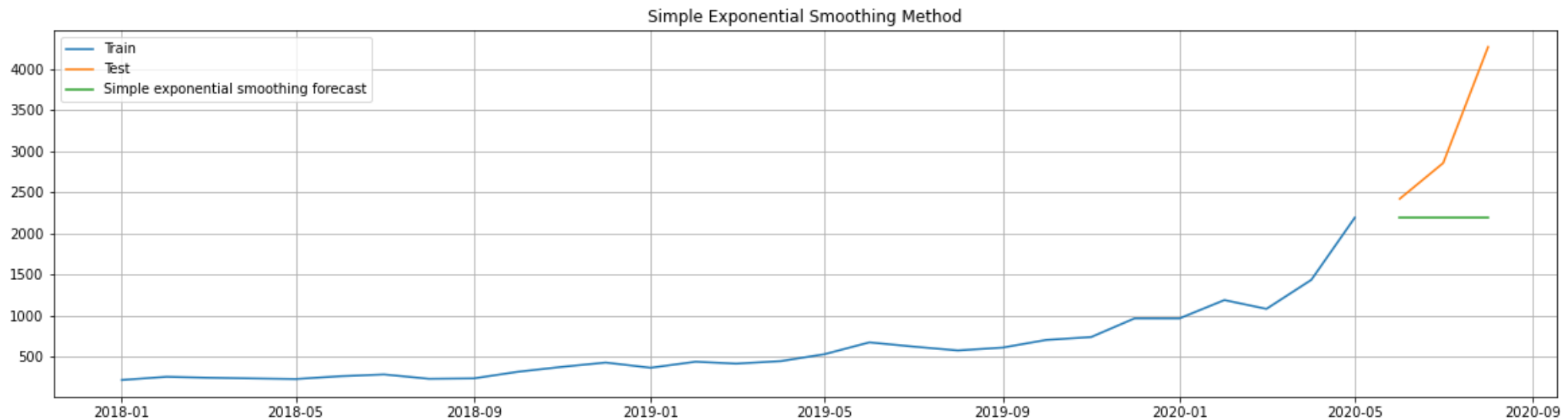
Method	RMSE	MAPE
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0 Simple moving average forecast-3 months	1794.92	47.81
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SIMPLE MOVING AVERAGE METHOD



SIMPLE EXPONENTIAL SMOOTHING



Method	RMSE	MAPE
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0 Simple exponential smoothing forecast	1268.86	27.25
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SUMMARY

Based on the different methods performed it is found to be that the Holtz exponential smoothing method is found to be better for predicting the price of bit coin.