Beer sales forecast, the data has altogether of 2 millions of datasets with around 24 columns.

I have to perform sales forecast with the given data. Here i have perform forecast for one month sales and also for the rest of the months.

For Example:

Beer sales 1 month forecasting by flavour for Andheri

*#beer sales for andheri for 1 month and also rest of the month.*

x.set\_index('date').resample('M')["beer\_litres"].sum()

Out[17]:

date

2015-11-30 280040.0 ------------------> (1st month forecast)

2015-12-31 824540.0

2016-01-31 788210.0

2016-02-29 742210.0

2016-03-31 687370.0

2016-04-30 978100.0

2016-05-31 535710.0

2016-06-30 930990.0

2016-07-31 864390.0

2016-08-31 1012100.0

2016-09-30 741610.0

2016-10-31 545030.0

2016-11-30 930720.0

2016-12-31 1098590.0

2017-01-31 657930.0

2017-02-28 862960.0

2017-03-31 534630.0

2017-04-30 535690.0

Freq: M, Name: beer\_litres, dtype: float64

I have performed forecast for each given location in accordance with the flavour of beer for both months and weeks.

Here i have thought of three model

## ARIMA (Autoregressive Integrated Moving Average)

1. LSTM Neural Network
2. Prophet

Reason for Selecting these model were that all this three models are the best fit for time series data.

Models couldn't be made as every time I train the model after 30-40 minutes approx the kernel died every time. My machine couldn't process.