

```
Import pandas as pd
```

```
Import numpy as np
```

```
Import matplotlib.pyplot as plt
```

```
%matplotlib inline
```

```
Import warnings
```

```
Warnings.filterwarnings('ignore')
```

```
From fbprophet import Prophet
```

```
# !pip install fbprophet
```

```
# install visual c++ - visual studio
```

```
# if you face errors – use conda install
```

```
Df = pd.read_csv('Traffic data.csv')
```

```
Df.head()
```

```
# check null values
```

```
Df.isnull().sum()
```

```
Df.info()
```

```
# convert object to datetime datatype
```

```
Df['Datetime'] = pd.to_datetime(df['Datetime'], format='%d-%m-%Y
```

```
%H:%M')
```

```
Df.info()
```

```
# EDA
```

```
Plt.figure(figsize=(10,7))
```

```
Plt.plot(df['Datetime'], df['Count'])
```

```
Plt.show()
```

```
Df.index = df['Datetime']
```

```
Df['y'] = df['Count']
```

```
Df.drop(columns=['ID', 'Datetime', 'Count'], axis=1,  
inplace=True)
```

```
Df = df.resample('D').sum()
```

```
Df.head()
```

```
Df['ds'] = df.index
```

```
Df.head()
```

```
lze = 60
```

```
From sklearn.model_selection import train_test_split
```

```
Train, test = train_test_split(df, test_size=size/len(df),  
shuffle=False)
```

```
Train.tail()
```

```
Test.head()
```

```
Test.tail()
```

```
Model = Prophet(yearly_seasonality=True,  
seasonality_prior_scale=0.9)
```

```
Model.fit(train)
```

```
Future = model.make_future_dataframe(periods=60)
```

Future

Forecast = model.predict(future)

Forecast.head()

Model.plot_components(forecast)

Pred = forecast.iloc[-60:, :]

Len(pred)

test results

Plt.figure(figsize=(10,7))

Plt.plot(test['ds'], test['y'])

Plt.plot(pred['ds'], pred['yhat'], color='red')

```
Plt.plot(pred['ds'], pred['yhat_lower'], color='green')
```

```
Plt.plot(pred['ds'], pred['yhat_upper'], color='orange')
```

```
Plt.show()
```

```
Plt.plot(df['ds'], df['y'])
```

```
Plt.show()
```

```
# forecast data
```

```
Plt.plot(forecast['ds'], forecast['yhat'])
```

```
Plt.show()
```

```
Model = Prophet(yearly_seasonality=True,  
seasonality_prior_scale=0.9)
```

```
Model.fit(df)
```

```
Future = model.make_future_dataframe(periods=200)
```

```
Forecast = model.predict(future)
```

```
Forecast.head()
```

```
# forecast data
```

```
Plt.plot(forecast['ds'], forecast['yhat'])
```

```
Plt.show()
```