```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plta
!pip install pystan fbprophet
from fbprophet import Prophet
```

```
Requirement already satisfied: pystan in /usr/local/lib/python3.7/dist-packages (2.19.1
Requirement already satisfied: fbprophet in /usr/local/lib/python3.7/dist-packages (0.7
Requirement already satisfied: numpy>=1.7 in /usr/local/lib/python3.7/dist-packages (fr
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Requirement already satisfied: korean-lunar-calendar in /usr/local/lib/python3.7/dist-p
```

```
df = pd.read_csv('30dayshourly.csv')
df=df.iloc[:-24]
df.head()
```

| | _time | IP_Sessions(K) |
|---|---|---|
| **0** | 2021-05-22T00:00:00.000-0400 | 11951.524 |
| **1** | 2021-05-22T01:00:00.000-0400 | 11879.647 |
| **2** | 2021-05-22T02:00:00.000-0400 | 11782.014 |
| **3** | 2021-05-22T03:00:00.000-0400 | 11737.477 |
| **4** | 2021-05-22T04:00:00.000-0400 | 11695.114 |

```
df.columns=['ds','y']
df.head()
```

| | ds | y |
|---|---|---|
| **0** | 2021-05-22T00:00:00.000-0400 | 11951.524 |
| **1** | 2021-05-22T01:00:00.000-0400 | 11879.647 |
| **2** | 2021-05-22T02:00:00.000-0400 | 11782.014 |
| **3** | 2021-05-22T03:00:00.000-0400 | 11737.477 |

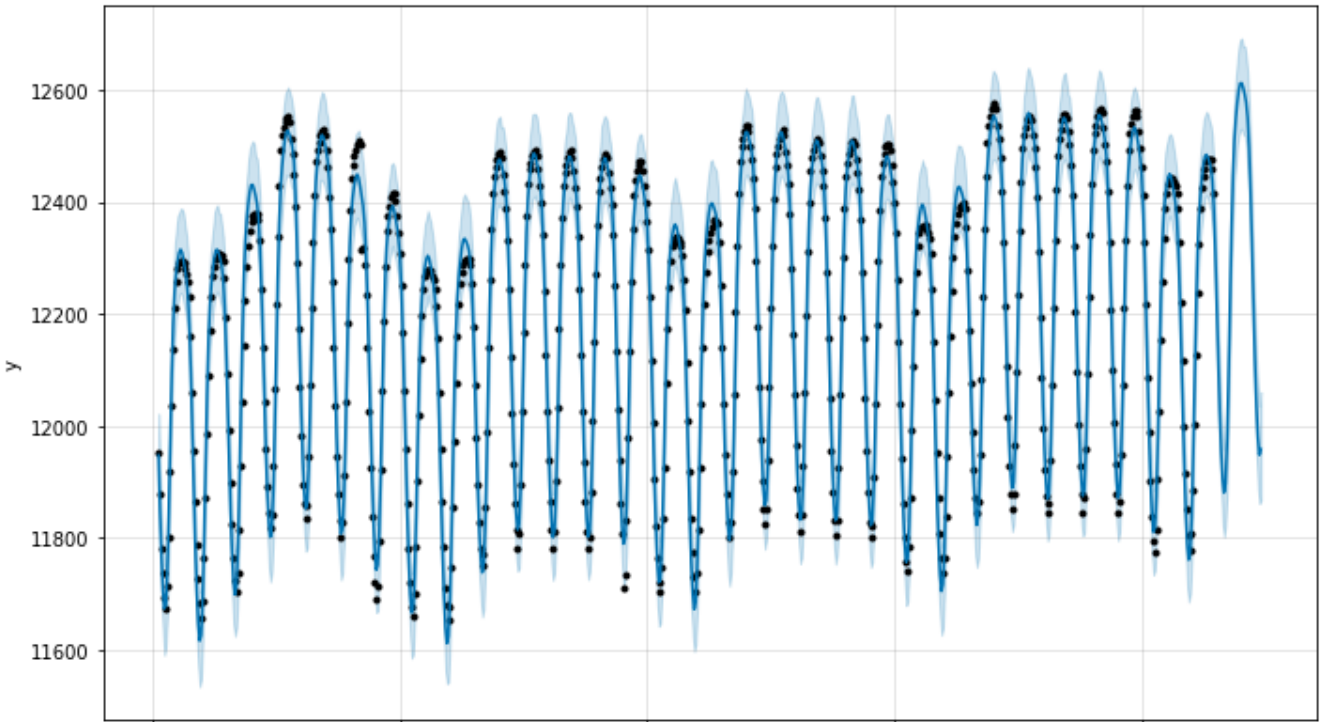
```
df['ds'] = pd.to_datetime(df['ds'])


df['ds'] = df['ds'].dt.tz_convert(None)


m = Prophet(interval_width=0.95, daily_seasonality=True)
model = m.fit(df)
```

```
INFO:fbprophet:Disabling yearly seasonality. Run prophet with yearly_seasonality=True t
```

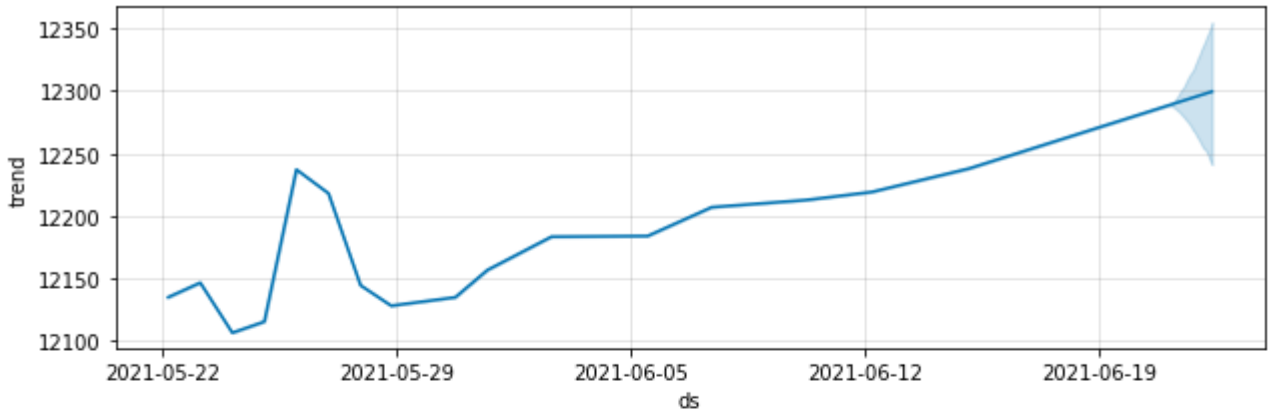
```
future = m.make_future_dataframe(periods=32,freq='h')
forecast = m.predict(future)
forecast.tail()
```

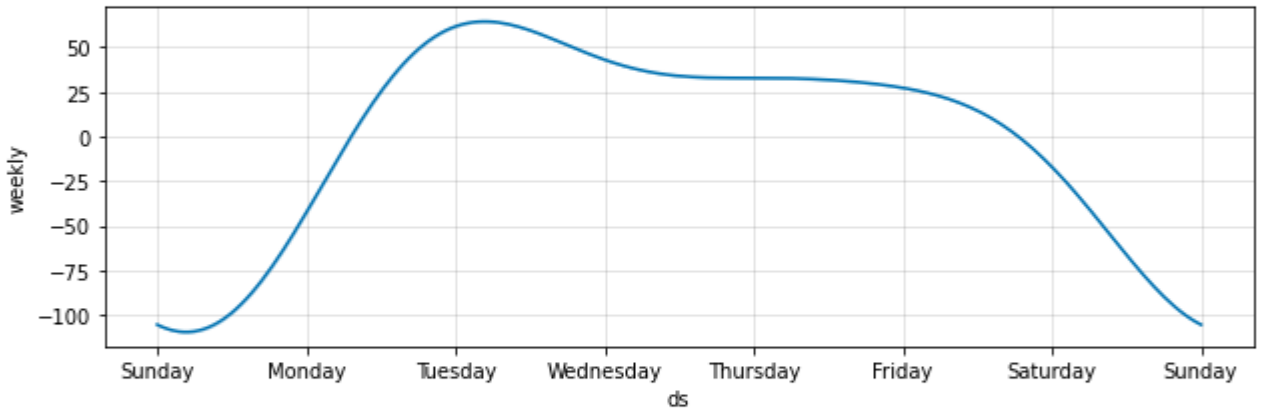
| | ds | trend | yhat_lower | yhat_upper | trend_lower | trend_upper |
|---|---|---|---|---|---|---|
| **745** | 2021-06-22 05:00:00 | 12298.170431 | 12020.643603 | 12203.689200 | 12251.529807 | 12343.322292 |
| **746** | 2021-06-22 06:00:00 | 12298.523639 | 11948.413229 | 12123.536327 | 12249.298886 | 12345.827330 |
| **747** | 2021-06-22 07:00:00 | 12298.876848 | 11888.441978 | 12072.767124 | 12246.202197 | 12348.505278 |
| **748** | 2021-06-22 08:00:00 | 12299.230057 | 11862.045229 | 12035.723674 | 12243.075692 | 12351.527350 |
| **749** | 2021-06-22 09:00:00 | 12299.583266 | 11867.467309 | 12061.004771 | 12241.372653 | 12355.017091 |

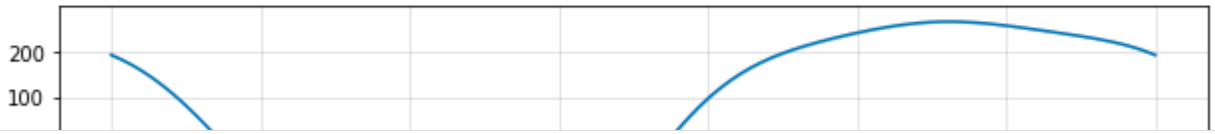
```
plot1 = m.plot(forecast)
```




```
plot2 = m.plot_components(forecast)
```




✓ 0s completed at 5:51 PM