Ex.No: 01A PLOT A TIME SERIES DATA

Date:

AIM:

To Develop a python program to Plot a time series data of power consumption.

ALGORITHM:

- 1. Import the required packages like pandas and matplot
- 2. Read the dataset using the pandas
- 3. Calculate the mean for the respective column.
- 4. Plot the data according to need and can be altered monthly, or yearly.
- 5. Display the graph.

PROGRAM:

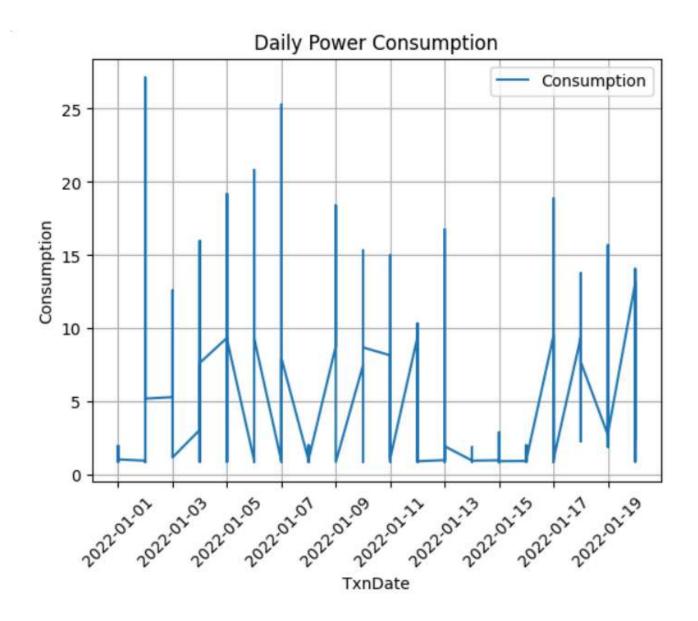
```
import pandas as pd
import matplotlib.pyplot as plt
data = pd.read_csv("/content/KwhConsumptionBlower78_1.csv")
data.head()
data['TxnDate']=pd.to_datetime(data['TxnDate'])
data.set_index('TxnDate',inplace=True)
plt.plot(data.index,data['Consumption'],label='Consumption')
plt.title("Daily Power Consumption")
plt.xlabel("TxnDate")
plt.xticks(rotation=45)
plt.ylabel("Consumption")
plt.grid(True)
plt.legend()
plt.show()
```

Dataset:

7		Unnamed: 0	TxnDate	TxnTime	Consumption
	0	76229	01 Jan 2022	16:55:52	1.010
	1	76258	01 Jan 2022	21:45:29	0.908
	2	76287	01 Jan 2022	12:24:52	0.926
	3	76316	01 Jan 2022	04:07:36	0.928
	4	76345	01 Jan 2022	06:52:25	0.916



OUTPUT:



RESULT:

Thus we have created the python code for plotting the time series of given dataset.