Electricity Price Prediction using Python

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Problem Definition:

- Suppose that your business relies on computing services where the power consumed by your machines varies throughout the day. You do not know the actual cost of the electricity consumed by the machines throughout the day
- The objective is to uncover hidden patterns within the data and create meaningful Electricity Bill predictions.

1. DateTime: Date and time of the record
2. Holiday: contains the name of the holiday if the day is a national holiday
3. HolidayFlag: contains 1 if it's a bank holiday otherwise 0
4. DayOfWeek: contains values between 0-6 where 0 is Monday
5. SystemLoadEP2: actual national system load
6. SMPEP2: the actual price of the electricity consumed

Python for Data Set:

```
Import pandas as pd

Import numpy as np

Data=pd.read_csv(https://raw.githubusercontent.com/amankharwal/Website-data/master/electricity.csv)

Print(data.head())
```

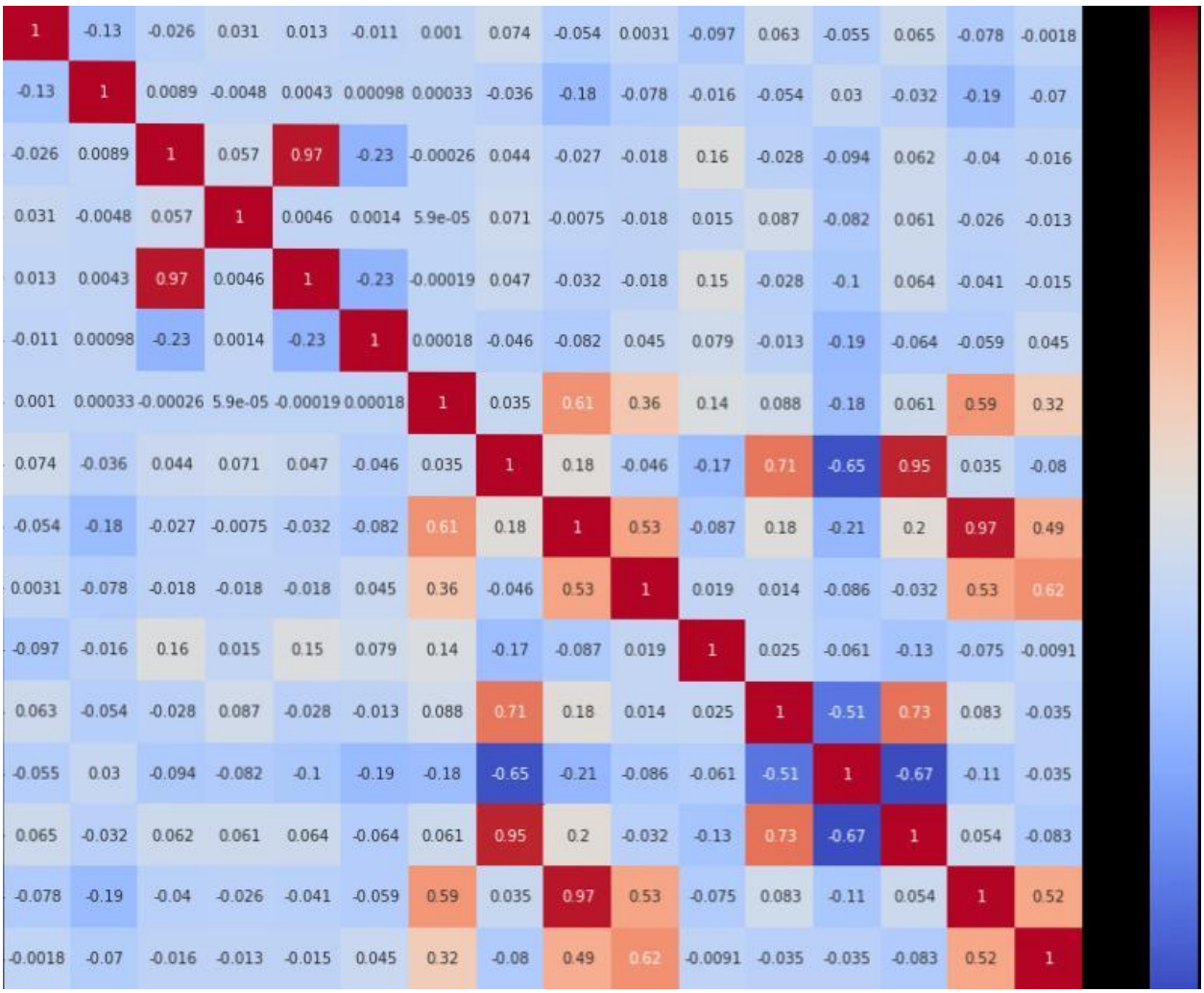
Example Data Set:

	DateTime	Holiday	…	SystemLoadEP2	SMPEP2
0	01/11/2011 00:00	None	…	3159.60	54.32
1	01/11/2011 00:30	None	…	2973.01	54.23
2	01/11/2011 01:00	None	…	2834.00	54.23
3	01/11/2011 01:30	None	…	2725.99	53.47

4 01/11/2011 02:00 None … 2655.64 39.87

Python:

```
Import seaborn as sns
Import matplotlib.pyplot as plt
Correlations = data.corr(method='pearson')
Plt.figure(figsize=(16, 12))
Sns.heatmap(correlations, cmap="coolwarm", annot=True)
Plt.show()
```



Summary

Predicting the price of electricity helps us to understand how much electricity expenses have to pay every year.