```
from google.colab import files
```

```
upload=files.upload()
```

Choose Files TATA POWER 10D.xlsx

- **TATA POWER 10D.xlsx**(application/vnd.openxmlformats-officedocument.spreadsheetml.sheet) - 9006 bytes, last modified: 2/10/2022 - 100% done

Saving TATA POWER 10D.xlsx to TATA POWER 10D.xlsx

```
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
tatapower=pd.read_excel('TATA POWER 10D.xlsx')
tatapower.head()
```

	Date	Open	High	Low	Close	Adj Close	Volume
0	2022-01-28	244.699997	250.000000	242.850006	244.050003	244.050003	34523855
1	2022-01-31	247.949997	249.550003	245.300003	246.050003	246.050003	24939671
2	2022-02-01	249.500000	256.399994	244.800003	249.850006	249.850006	74185275
3	2022-02-02	251.899994	255.000000	249.250000	250.600006	250.600006	25162901
4	2022-02-03	250.550003	254.399994	249.300003	252.850006	252.850006	27724870

```
tatapower.shape
```

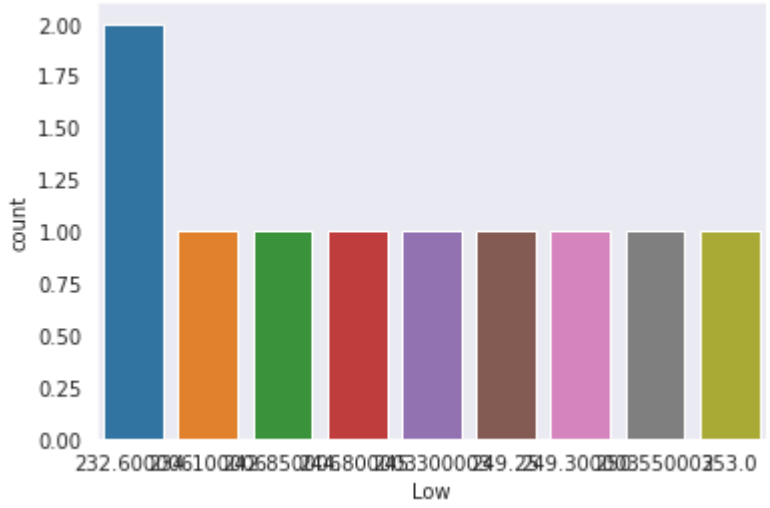
```
(10, 7)
```

```
tatapower.isnull
```

```
<bound method DataFrame.isnull of         Date        Open        High  ...       Close
0 2022-01-28  244.699997  250.000000  ...  244.050003  244.050003  34523855
1 2022-01-31  247.949997  249.550003  ...  246.050003  246.050003  24939671
2 2022-02-01  249.500000  256.399994  ...  249.850006  249.850006  74185275
3 2022-02-02  251.899994  255.000000  ...  250.600006  250.600006  25162901
4 2022-02-03  250.550003  254.399994  ...  252.850006  252.850006  27724870
5 2022-02-04  253.800003  257.899994  ...  254.350006  254.350006  39309420
6 2022-02-07  255.500000  256.700012  ...  251.800003  251.800003  32770930
7 2022-02-08  252.500000  253.600006  ...  234.850006  234.850006  82053977
8 2022-02-09  236.699997  238.899994  ...  238.000000  238.000000  35604075
9 2022-02-10  238.500000  244.500000  ...  241.300003  241.300003  55131292

[10 rows x 7 columns]>
```

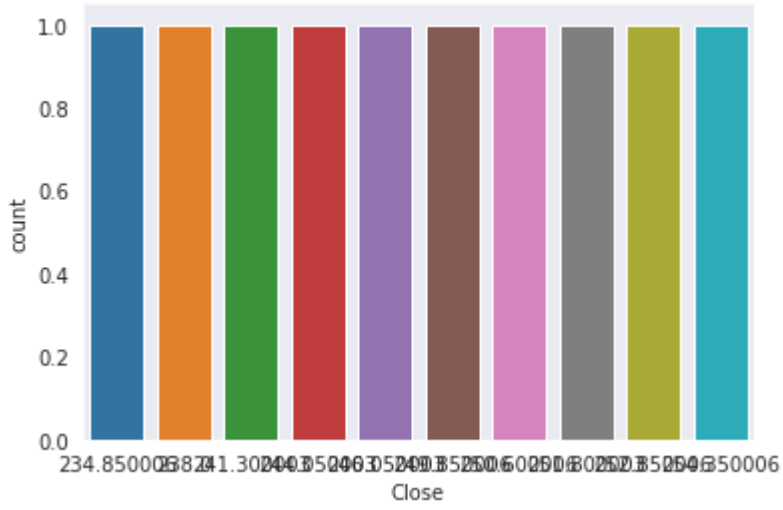
```
sns.set_style('dark')
sns.countplot(x='Low',data=tatapower)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b7b73990>
```



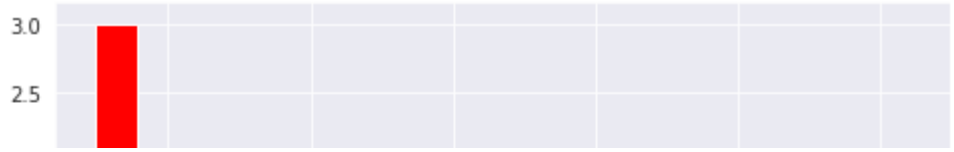

```
sns.set_style('dark')
sns.countplot(x='Close',data=tatapower)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b7b73a50>
```



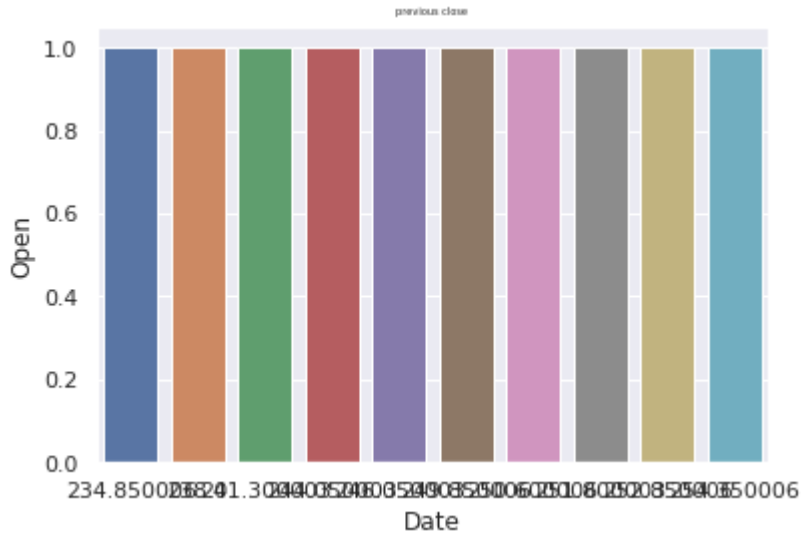

```
tatapower['Volume'].hist(color='red', bins=20, figsize=(8,4))
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b7471c10>
```




```
sns.countplot(tatapower['Close'])
plt.title('previous close', fontsize=5)
plt.xlabel('Date')
plt.ylabel('Open')
plt.show()
```

```
/usr/local/lib/python3.7/dist-packages/seaborn/_decorators.py:43: FutureWarning: P
  FutureWarning
```




```
tatapower.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 10 entries, 0 to 9
Data columns (total 7 columns):
 #   Column     Non-Null Count  Dtype         
---  ------     --------------  -----         
 0   Date       10 non-null     datetime64[ns]
 1   Open       10 non-null     float64       
 2   High       10 non-null     float64       
 3   Low        10 non-null     float64       
 4   Close      10 non-null     float64       
 5   Adj Close  10 non-null     float64       
 6   Volume     10 non-null     int64         
dtypes: datetime64[ns](1), float64(5), int64(1)
memory usage: 688.0 bytes
```

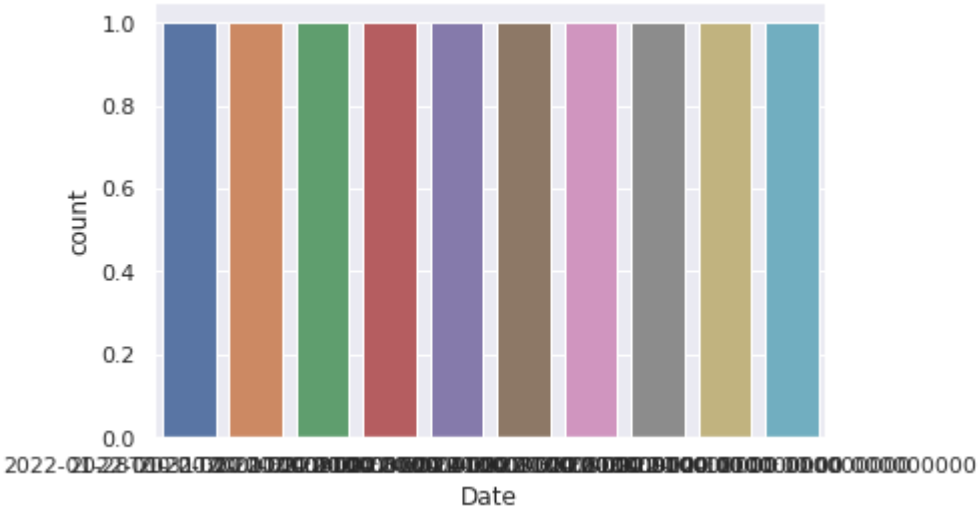
```
tatapower.drop_duplicates(inplace = True)
```

```
tatapower.corr()
#Note: The corr() method ignores "not numeric" columns.
```

	Open	High	Low	Close	Adj Close	Volume
Open	1.000000	0.946157	0.707985	0.588307	0.588307	0.011000
High	0.946157	1.000000	0.755624	0.690590	0.690590	0.096080
Low	0.707985	0.755624	1.000000	0.962347	0.962347	-0.522498
Close	0.588307	0.690590	0.962347	1.000000	1.000000	-0.468903
Adj Close	0.588307	0.690590	0.962347	1.000000	1.000000	-0.468903
Volume	0.011000	0.096080	-0.522498	-0.468903	-0.468903	1.000000

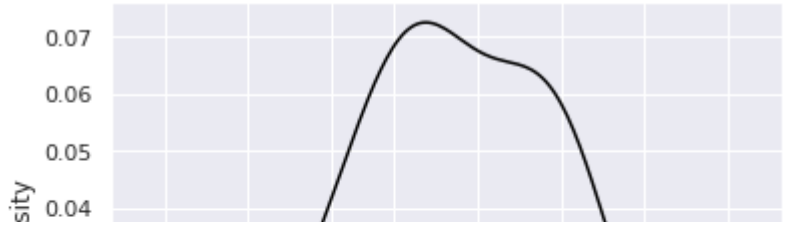
```
sns.countplot(x='Date',data=tatapower)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b4e48b50>
```



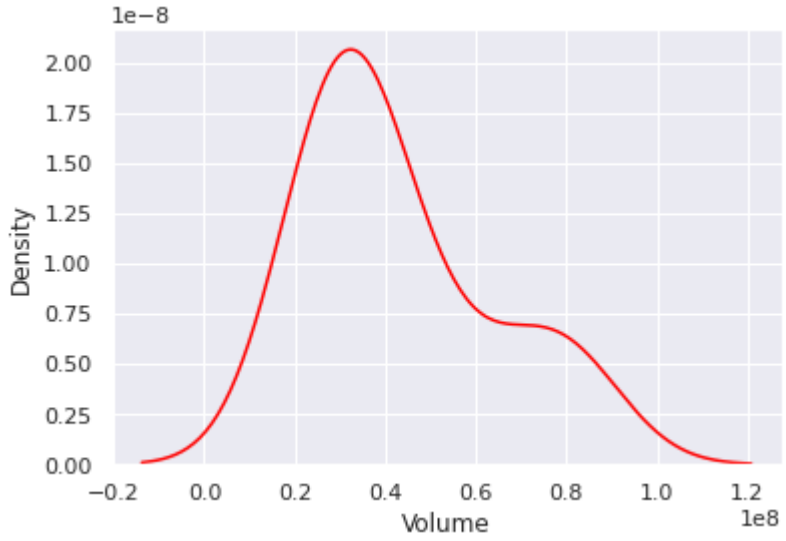

```
sns.kdeplot(x = 'Date' , data = tatapower , color = 'black')
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b4db9850>
```



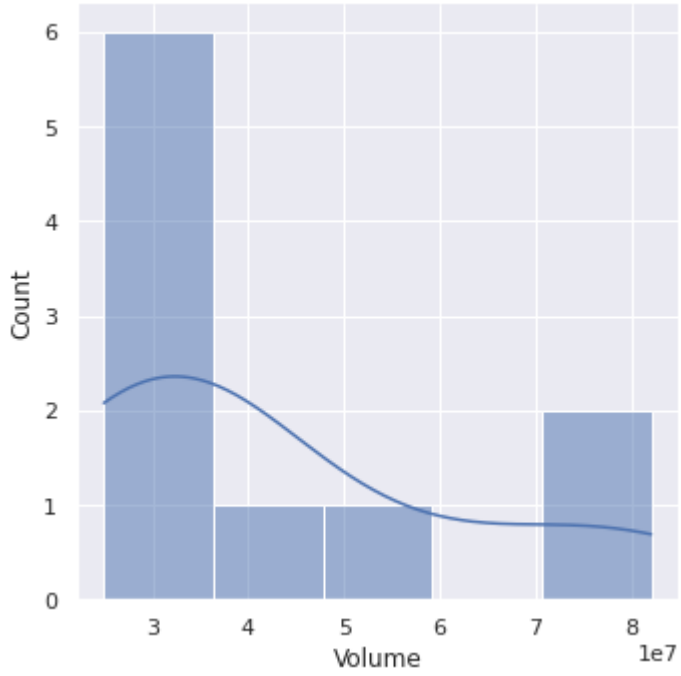

```
sns.kdeplot(x = 'Volume' , data = tatapower , color = 'red')
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88b2cbeb50>
```




```
sns.displot(x = 'Volume',kde=True,bins = 5 , data =tatapower)
```

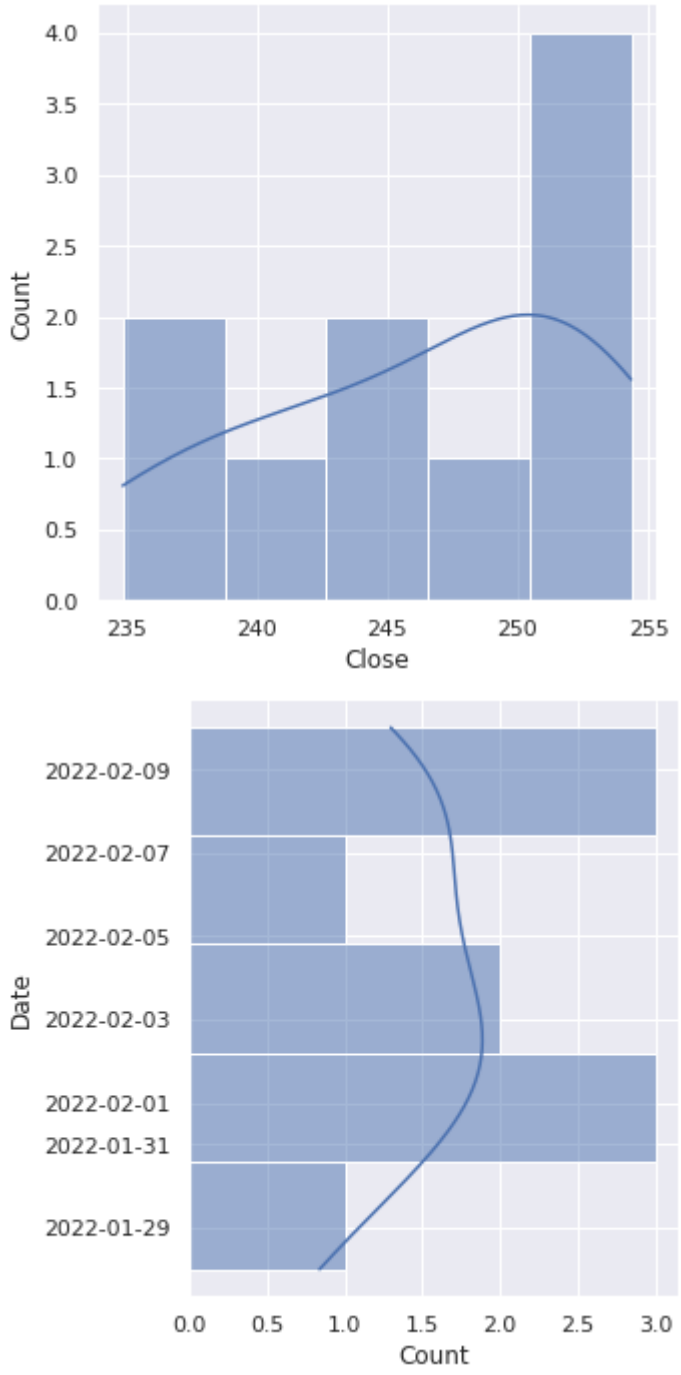
```
<seaborn.axisgrid.FacetGrid at 0x7f88b2d16c10>
```




```
sns.displot(x = 'Close', kde=True,bins = 5 , data =tatapower)
```

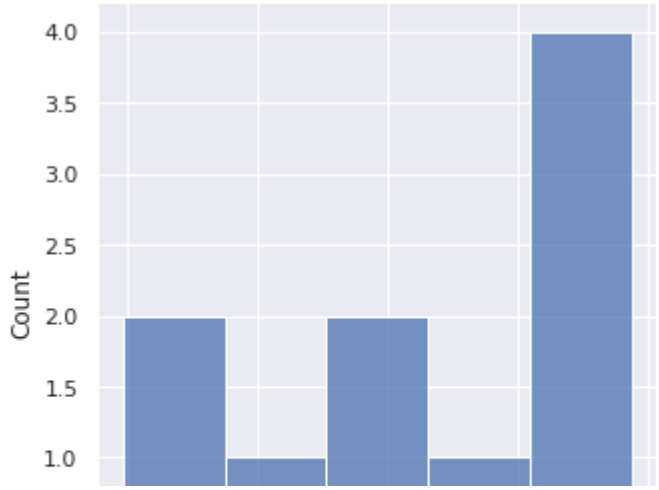
```
sns.displot(y = 'Date', kde=True,bins = 5 , data =tatapower)
#kde - It is set to False by default. However, if you wish to plot a KDE graph on top of the

#bins - The number of bins/bars. The lower the number, wider the bars and wider the intervals
```

```
<seaborn.axisgrid.FacetGrid at 0x7f88aa9f09d0>
```



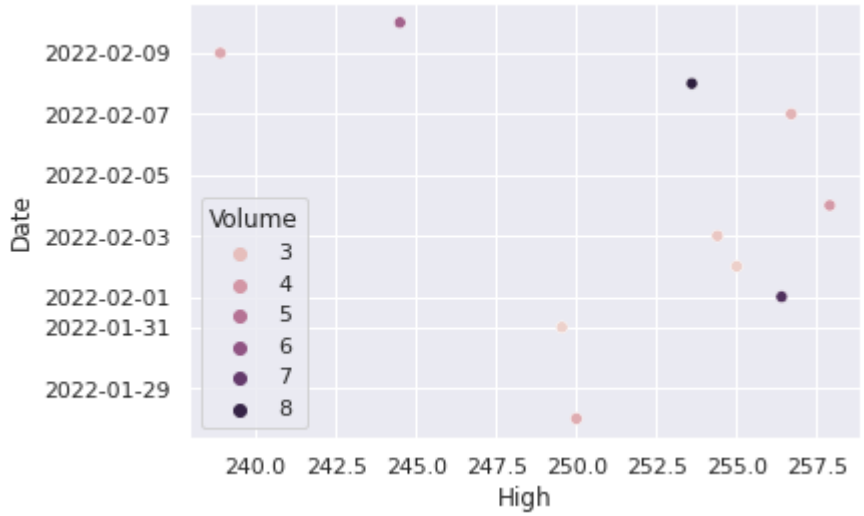

```
sns.displot(x = 'Close', kde=False,bins = 5 , data =tatapower)
```

```
<seaborn.axisgrid.FacetGrid at 0x7f88b4e3ea10>
```




```
sns.scatterplot(x='High', y ='Date' ,
data = tatapower , hue = 'Volume')
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88aa8c2cd0>
```

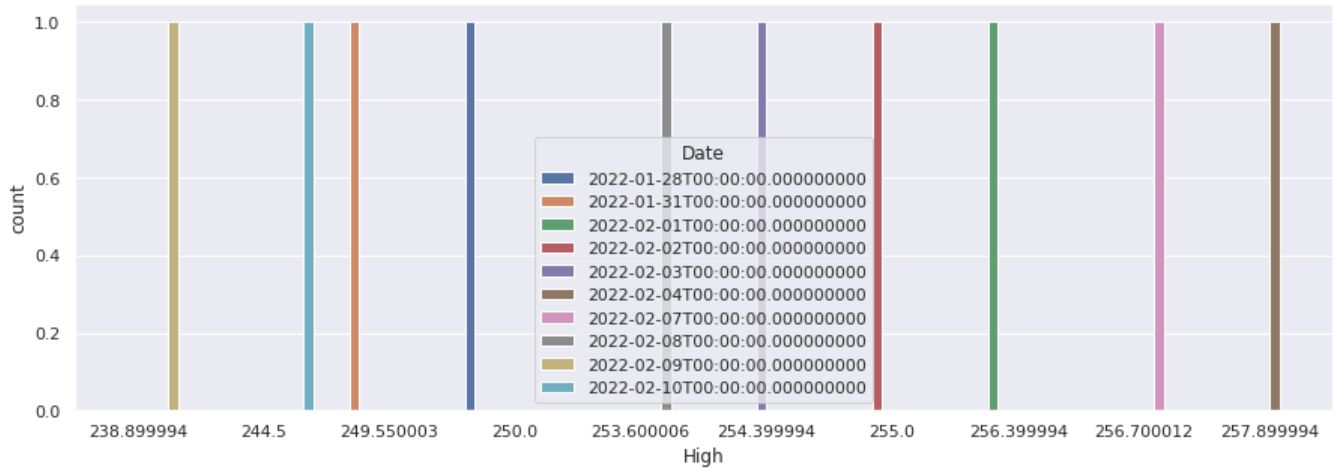



```
corr = tatapower.corr()
sns.heatmap(corr)
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88aa83cfd0>
```

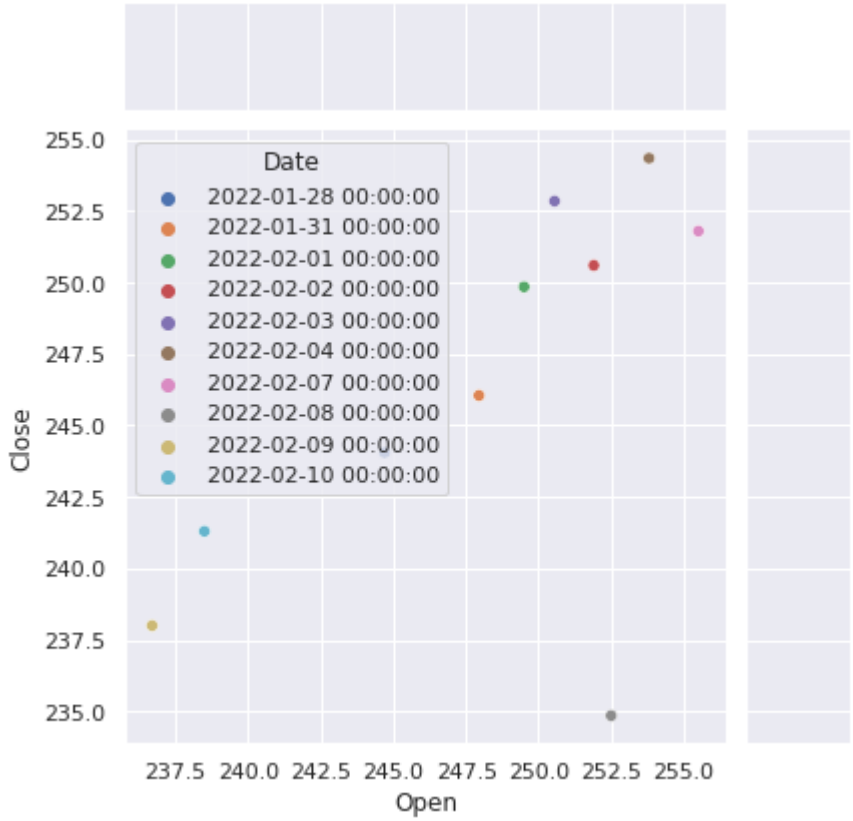

```
plt.figure(figsize=(15,5))
sns.countplot(x = 'High' , data = tatapower,
hue = 'Date')
```

```
<matplotlib.axes._subplots.AxesSubplot at 0x7f88aa1fa290>
```




```
sns.jointplot(x = 'Open', y = 'Close',
data = tatapower,hue = 'Date')
```

```
<seaborn.axisgrid.JointGrid at 0x7f88aa053e10>
```



✓ 1s completed at 10:41 PM

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