```
In [41]: import pandas as pd
import numpy as np
import matplotlib
import matplotlib.pyplot as plt
import seaborn as sns
%matplotlib inline
In [42]: df = nd.read csy("C:\\Users\\ellie\\OneDrive\\Deskton\\nroject03\\results.csy")
```

In [42]: df = pd.read\_csv("C:\\Users\\ellie\\OneDrive\\Desktop\\project03\\results.csv")
 df.head(10)

Out[42]:		ticker	hour	datetime	highest_hourly_stock_price
	0	BYND	10	2021-11-30 09:35:00-05:00	74.54
	1	BYND	10	2021-11-30 09:35:00-05:00	74.54
	2	BYND	10	2021-11-30 09:35:00-05:00	74.54
	3	BYND	11	2021-11-30 10:00:00-05:00	73.28
	4	BYND	11	2021-11-30 10:00:00-05:00	73.28
	5	BYND	11	2021-11-30 10:00:00-05:00	73.28
	6	BYND	12	2021-11-30 11:20:00-05:00	71.04
	7	BYND	12	2021-11-30 11:20:00-05:00	71.04
	8	BYND	12	2021-11-30 11:20:00-05:00	71.04
	9	BYND	13	2021-11-30 12:30:00-05:00	71.02

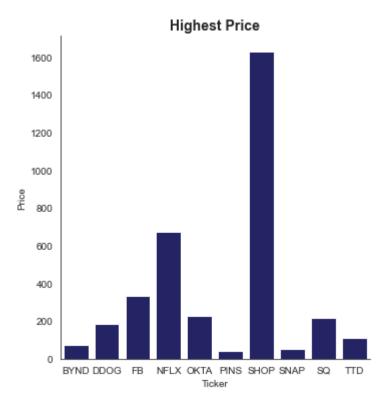
## **Data Visualization 1**

```
In [43]: sns.set_style("white")
  plt.figure(figsize = (8, 6))
  df1 = df.groupby('ticker').max()['highest_hourly_stock_price'].to_frame()
  df1.reset_index(inplace=True)

ax = sns.catplot(x='ticker',y='highest_hourly_stock_price',data=df1, kind='bar', color

plt.title("Highest Price", fontsize = 14, weight = "bold")
  plt.xlabel("Ticker")
  plt.ylabel("Price")
  sns.despine()
  plt.show()
```

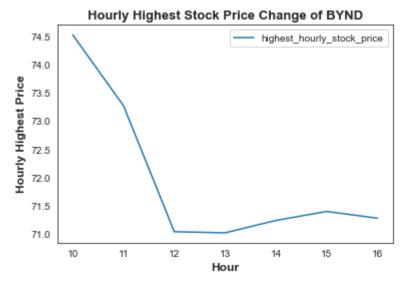
<Figure size 576x432 with 0 Axes>

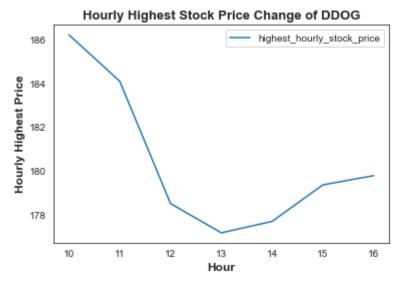


## **Data Visualization 2**

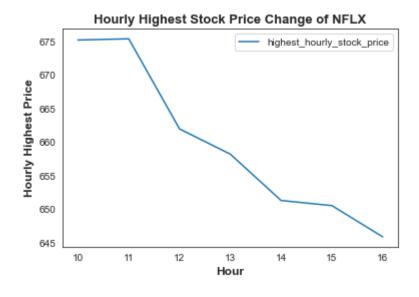
```
In [44]: df = df[['ticker','highest_hourly_stock_price','hour']]

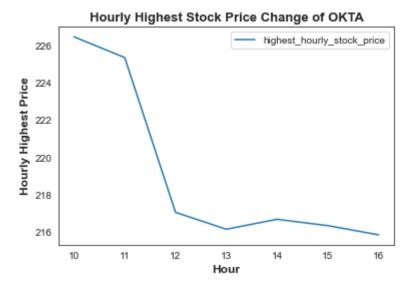
for i in df['ticker'].unique():
    plot = df[df['ticker'] == i]
    plot.set_index('hour').plot(kind='line')
    plt.title(f'Hourly Highest Stock Price Change of {i}', fontsize = 13, fontweight =
    plt.xlabel("Hour", fontsize = 12, fontweight = "bold")
    plt.ylabel("Hourly Highest Price", fontsize = 12, fontweight = "bold")
    plt.show()
```



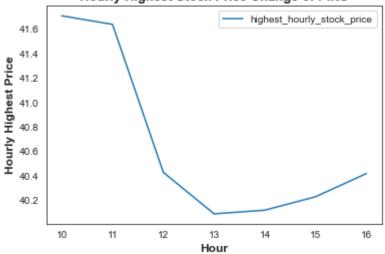








## Hourly Highest Stock Price Change of PINS



## Hourly Highest Stock Price Change of SHOP

