

Visualizations on Results Data

```
In [2]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
```

Read the data

```
In [3]: df = pd.read_csv('/Users/haiqiong/Desktop/project03/results.csv')
df
```

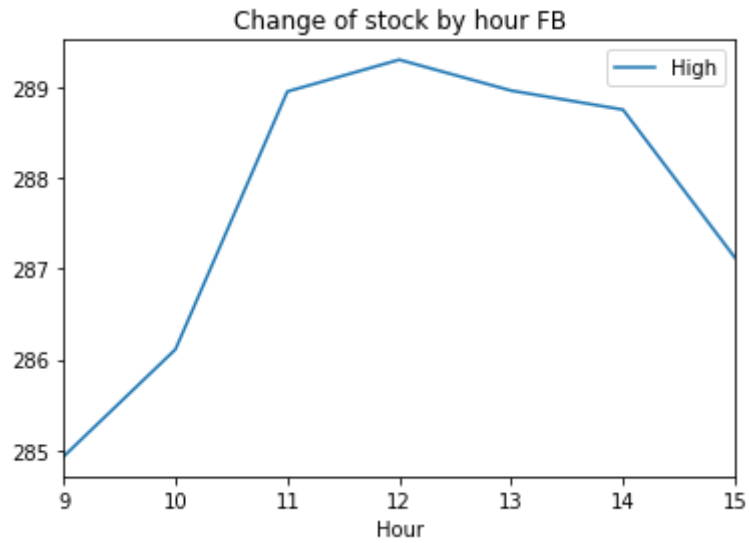
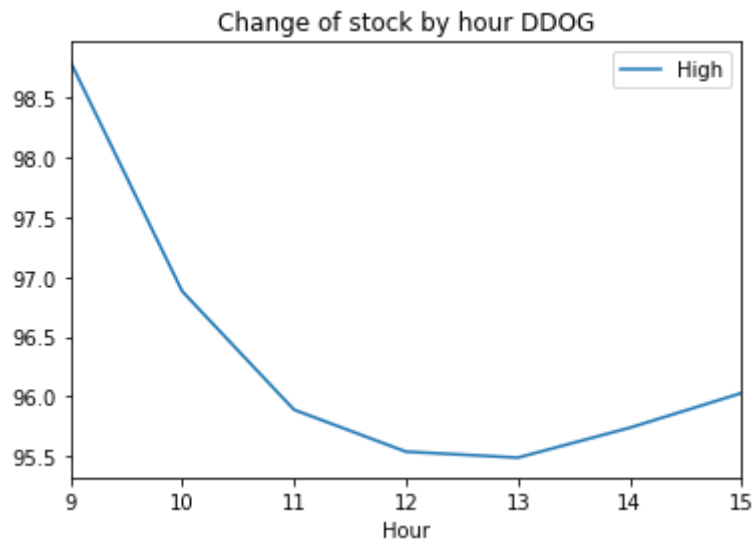
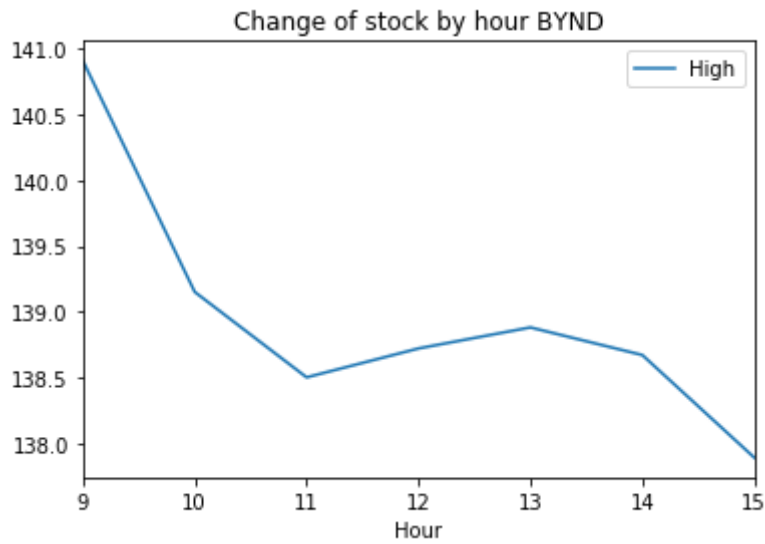
Out[3]:

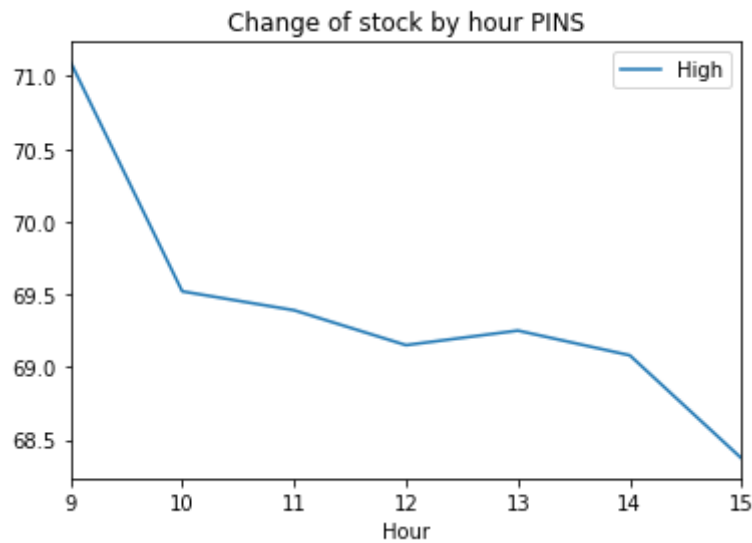
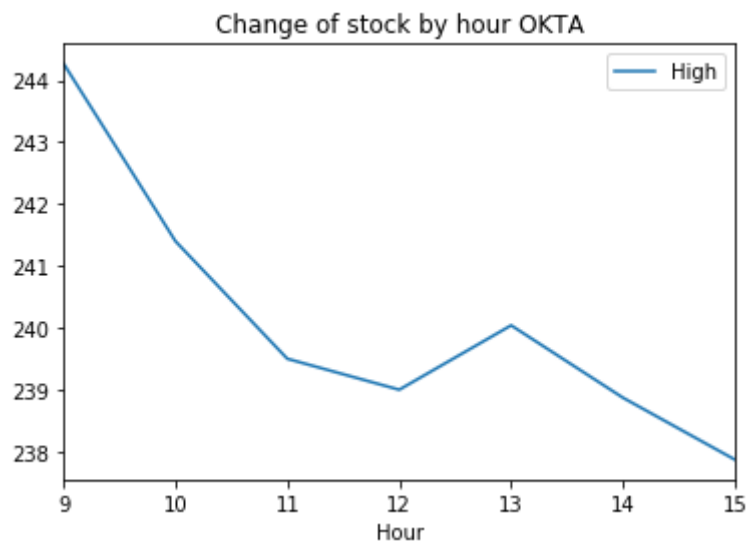
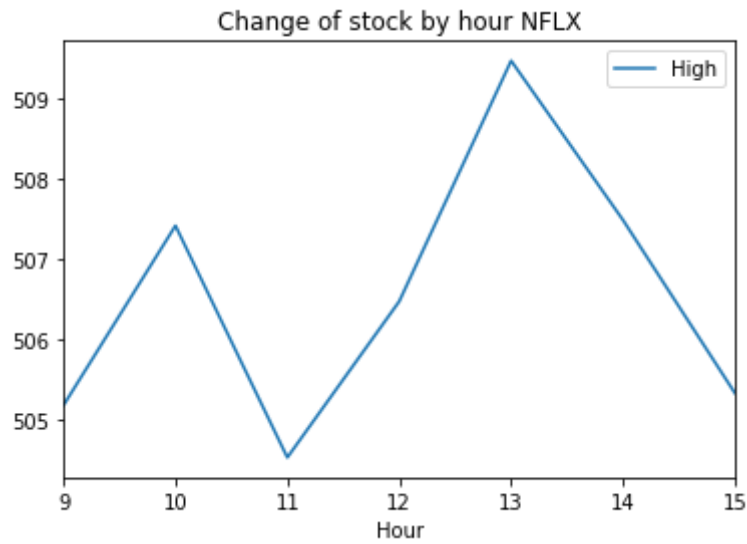
	Name	High	Hour	Datetime
0	BYND	140.91	9	12/01/2020 09:40:00
1	BYND	139.15	10	12/01/2020 10:00:00
2	BYND	138.50	11	12/01/2020 11:25:00
3	BYND	138.72	12	12/01/2020 12:30:00
4	BYND	138.88	13	12/01/2020 13:40:00
...
65	TTD	885.78	11	12/01/2020 11:10:00
66	TTD	883.44	12	12/01/2020 12:00:00
67	TTD	892.00	13	12/01/2020 13:50:00
68	TTD	887.53	14	12/01/2020 14:25:00
69	TTD	893.16	15	12/01/2020 15:55:00

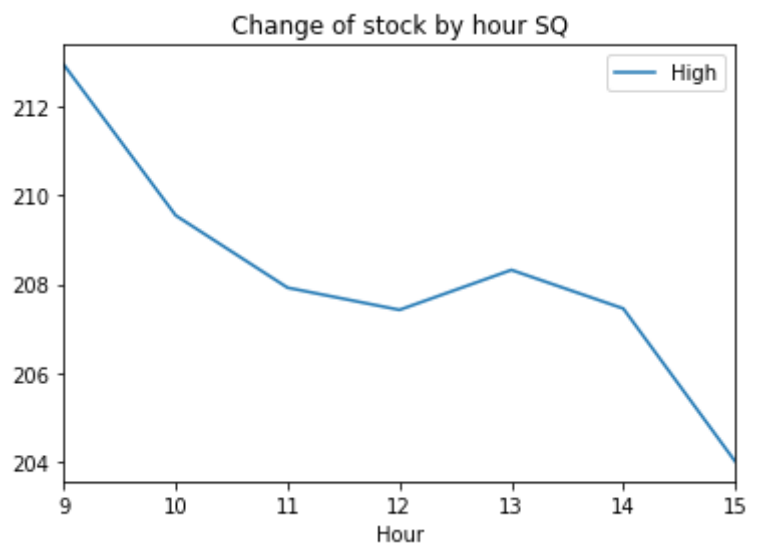
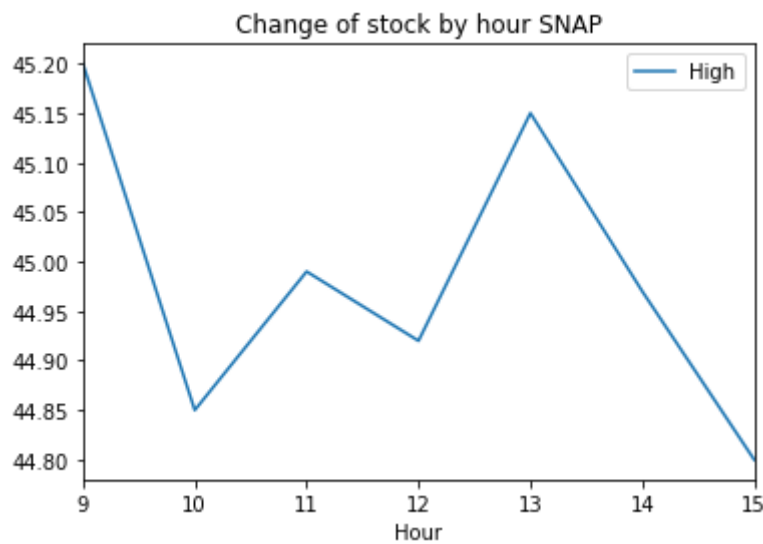
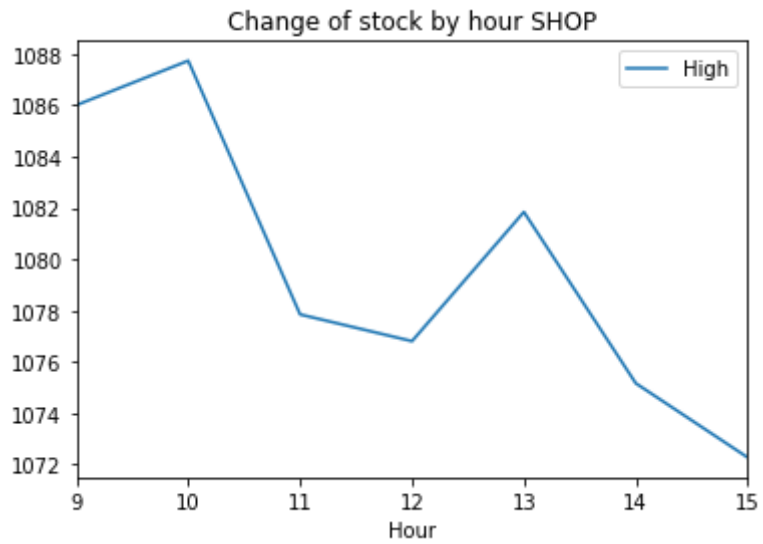
70 rows × 4 columns

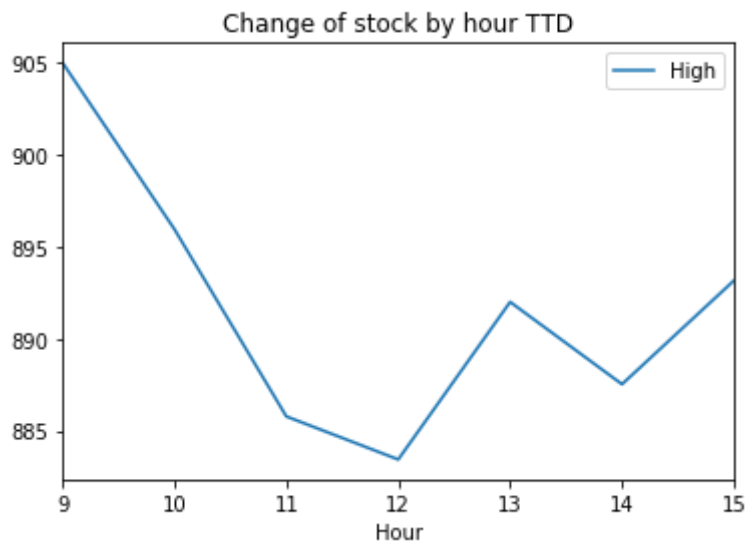
Visualizations

```
In [4]: ## 1. Line plot for all stocks by hour on 2020/12/01  
## With same x-axis and different y-axis  
  
df = df[['Name', 'High', 'Hour']]  
  
for i in df['Name'].unique():  
    plot = df[df['Name'] == i]  
    plot.set_index('Hour').plot(kind='line')  
    plt.title(f'Change of stock by hour {i}')  
    plt.show()
```







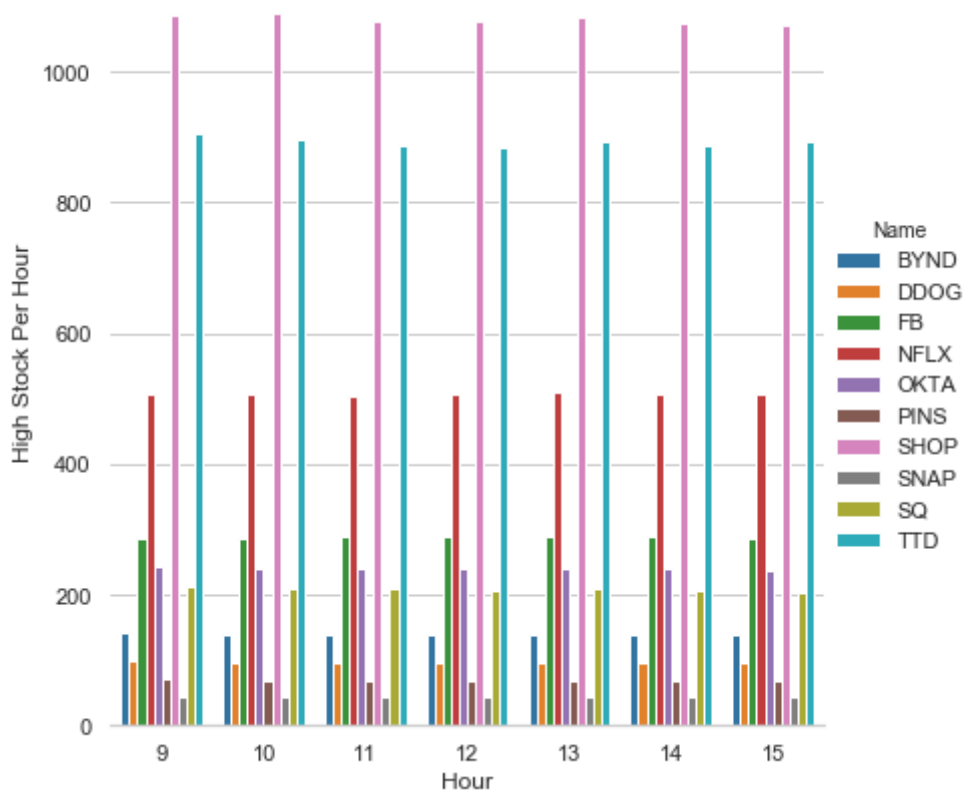


```
In [10]: ## 2. Grouped bar plot

sns.set(style="whitegrid")

# Draw a nested barplot to show survival for class and sex
g = sns.catplot(x="Hour", y="High", hue="Name", data=df,
                height=6, kind="bar", palette="tab10")
g.despine(left=True)
g.set_ylabels("High Stock Per Hour")
```

Out[10]: <seaborn.axisgrid.FacetGrid at 0x1a26aad8d0>



In []: