

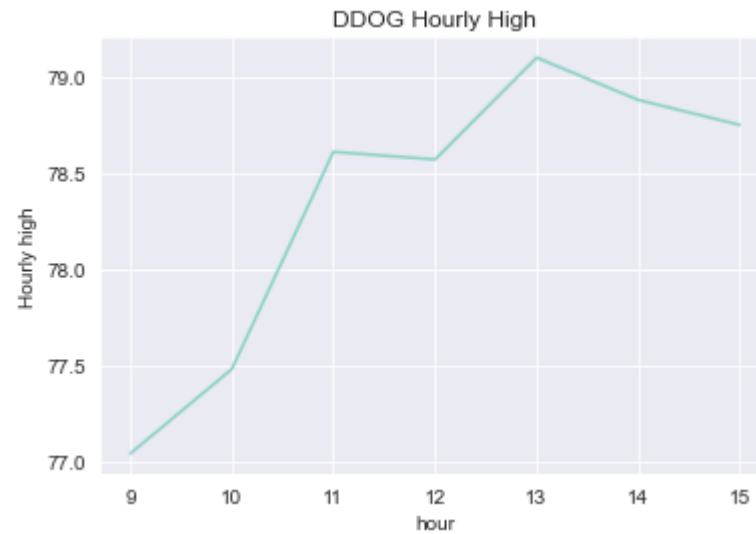
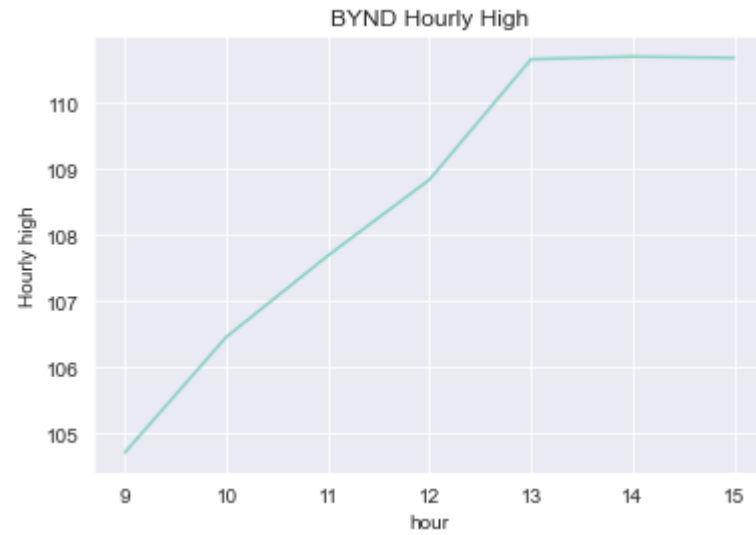
```
In [1]: ## Import Libraries  
import pandas as pd  
import seaborn as sns  
import matplotlib.pyplot as plt  
import numpy as np
```

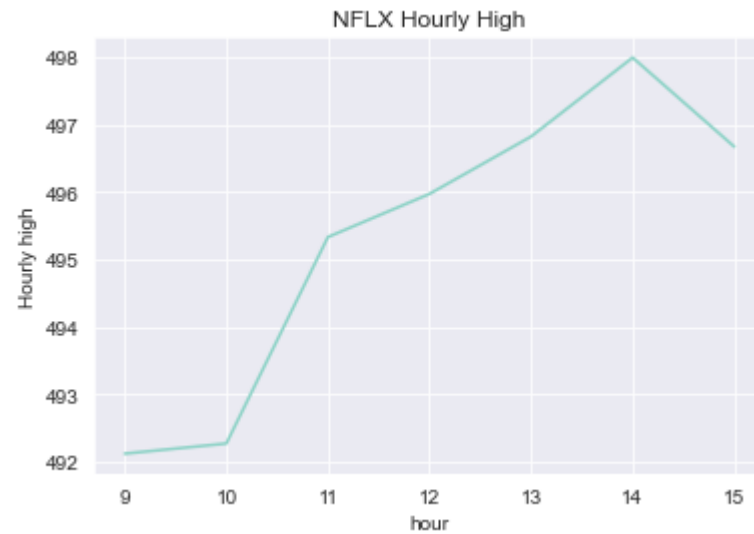
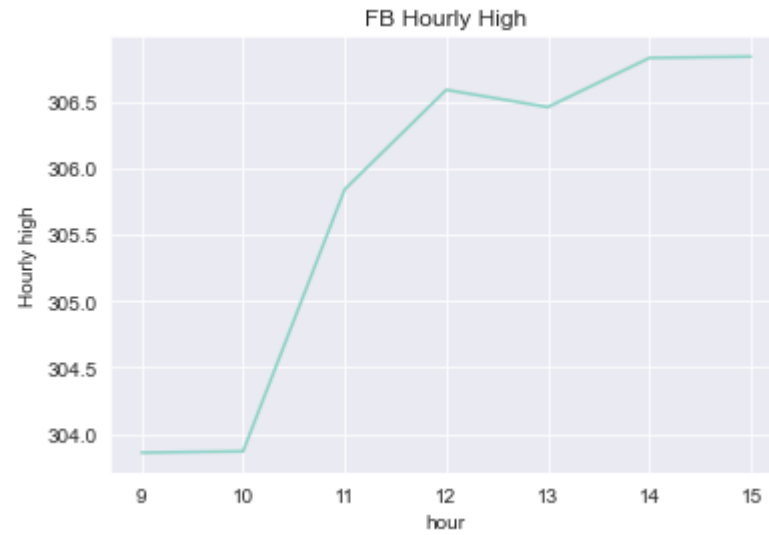
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In [2]: ## Read csv  
df = pd.read_csv("results.csv")  
df.head()
```

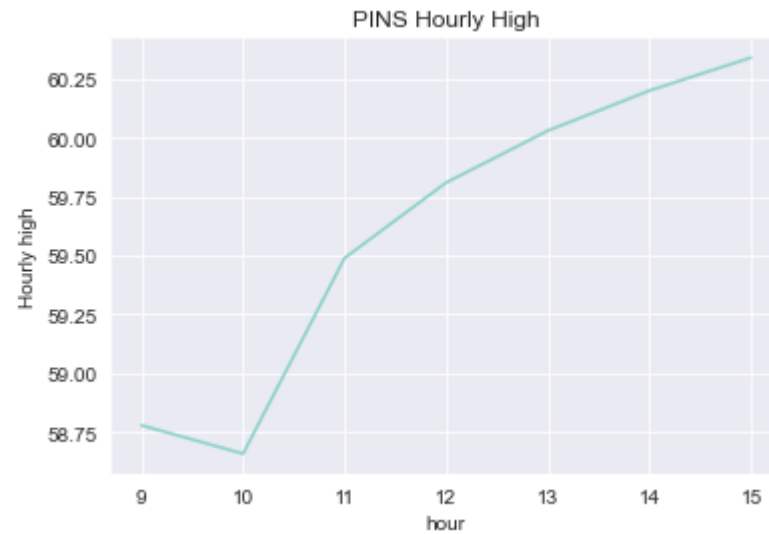
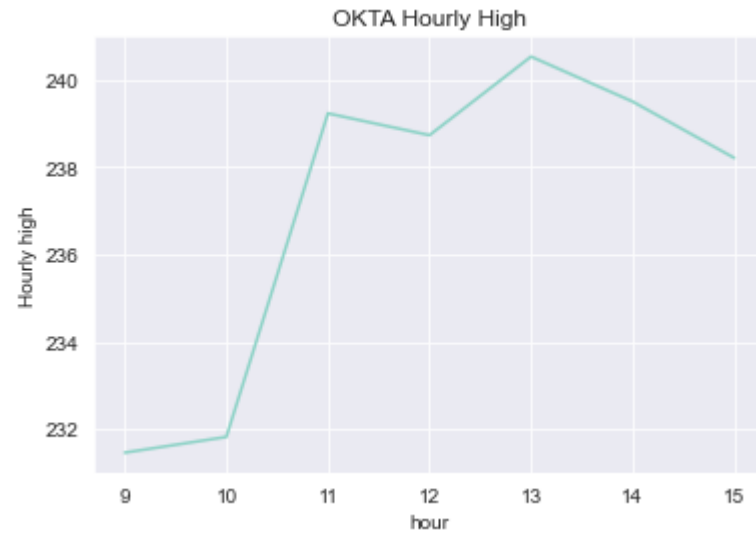
```
Out[2]:
```

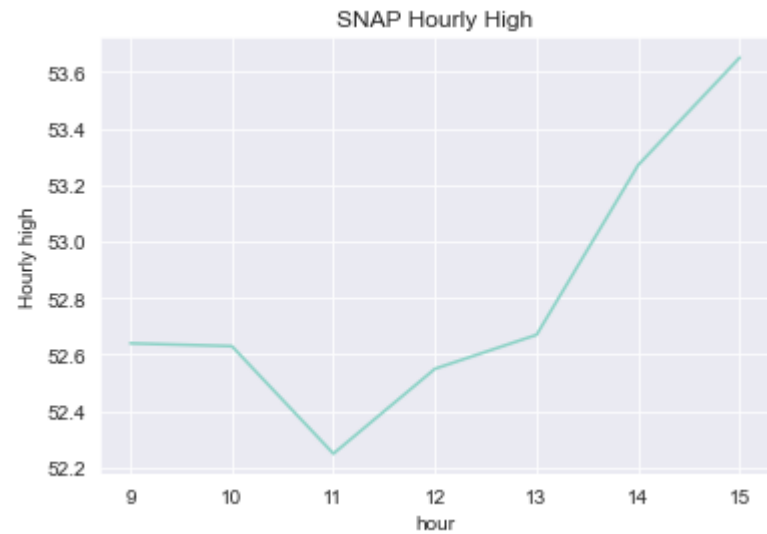
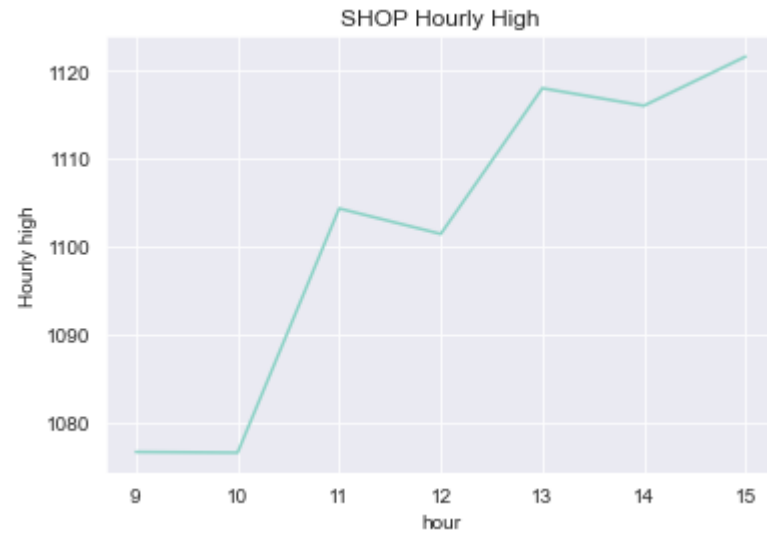
	name	hour	high
0	BYND	9	104.71
1	BYND	10	106.46
2	BYND	11	107.69
3	BYND	12	108.84
4	BYND	13	110.66

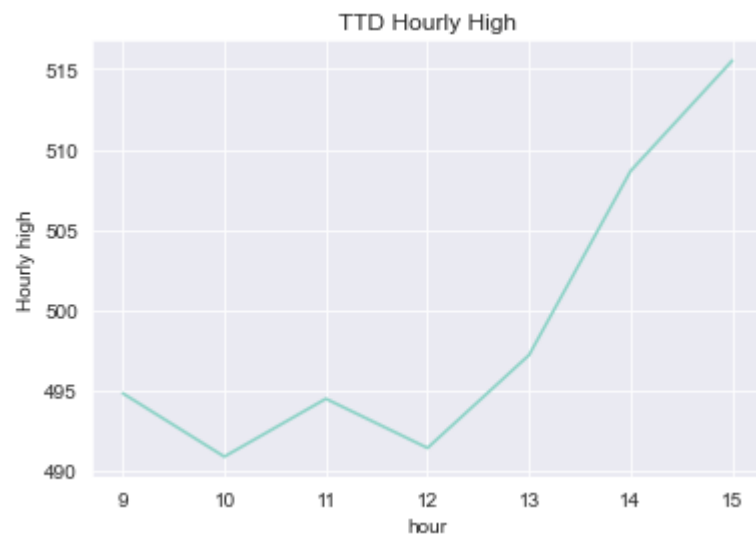
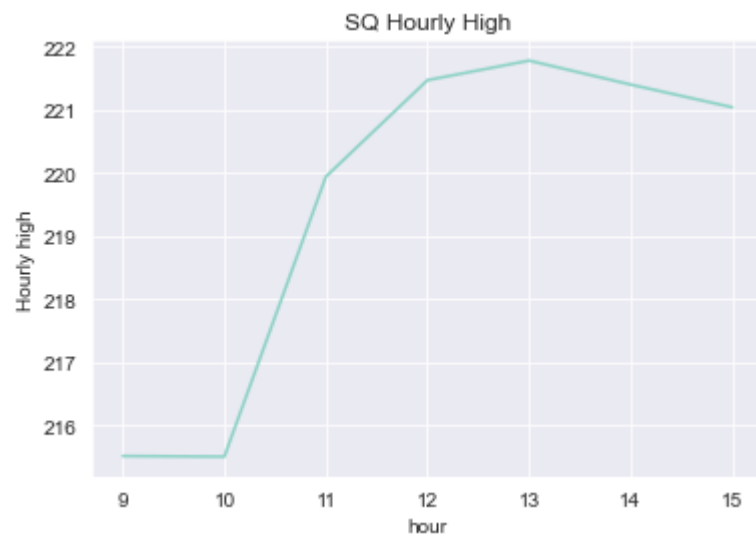
```
In [3]: ## Graphing hourly high for each stock  
stocks = df['name'].unique()  
sns.set_style("darkgrid")  
sns.set_palette("Set3")  
for s in stocks:  
    graph_df = df[df['name']==s]  
    sns.lineplot(x='hour', y='high', data=graph_df)  
    title=s+" Hourly High"  
    plt.title(title)  
    plt.ylabel("Hourly high")  
    plt.show()
```











```
In [4]: ## Pivot table
df2 = df.pivot(index = "name", columns = "hour", values = "high").reset_index()
df2.columns = df2.columns.astype(str)
df2.head(10)
```

```
Out[4]:
```

	hour	name	9	10	11	12	13	14	15
0	BYND	104.71	106.46	107.69	108.84	110.66	110.70	110.68	
1	DDOG	77.04	77.48	78.61	78.57	79.10	78.88	78.75	

hour	name	9	10	11	12	13	14	15
2	FB	303.86	303.87	305.84	306.59	306.46	306.83	306.84
3	NFLX	492.12	492.27	495.33	495.97	496.82	497.99	496.67
4	OKTA	231.46	231.82	239.23	238.73	240.53	239.50	238.21
5	PINS	58.78	58.66	59.49	59.81	60.03	60.20	60.34
6	SHOP	1076.58	1076.50	1104.30	1101.40	1117.99	1116.00	1121.59
7	SNAP	52.64	52.63	52.25	52.55	52.67	53.27	53.65
8	SQ	215.51	215.50	219.94	221.47	221.78	221.40	221.04
9	TTD	494.84	490.90	494.50	491.44	497.22	508.67	515.53

```
In [5]: ## Calculate Percent Change
df2['Percent Change'] = (df2["15"]-df2["9"])/df2["9"]
df2.head(10)
```

```
Out[5]:
```

hour	name	9	10	11	12	13	14	15	Percent Change
0	BYND	104.71	106.46	107.69	108.84	110.66	110.70	110.68	0.057015
1	DDOG	77.04	77.48	78.61	78.57	79.10	78.88	78.75	0.022196
2	FB	303.86	303.87	305.84	306.59	306.46	306.83	306.84	0.009807
3	NFLX	492.12	492.27	495.33	495.97	496.82	497.99	496.67	0.009246
4	OKTA	231.46	231.82	239.23	238.73	240.53	239.50	238.21	0.029163
5	PINS	58.78	58.66	59.49	59.81	60.03	60.20	60.34	0.026540
6	SHOP	1076.58	1076.50	1104.30	1101.40	1117.99	1116.00	1121.59	0.041808
7	SNAP	52.64	52.63	52.25	52.55	52.67	53.27	53.65	0.019187
8	SQ	215.51	215.50	219.94	221.47	221.78	221.40	221.04	0.025660
9	TTD	494.84	490.90	494.50	491.44	497.22	508.67	515.53	0.041811

```
In [6]: ## Graph Percent change
sns.barplot(x = "name",
            y = "Percent Change",
```

```
data = df2)
plt.title("Percent Change on May 11th 2021")
plt.ylabel("Percent Change")
plt.xlabel("Stock")
plt.show()
```

