Data Visualization for Finance Data

In [82]:
```
import pandas as pd
import numpy as np
import seaborn as sns
import matplotlib.pyplot as plt
import matplotlib
```

In [83]:
```
#Read data from a csv file
dstock = pd.read_csv('results.csv')
dstock
```

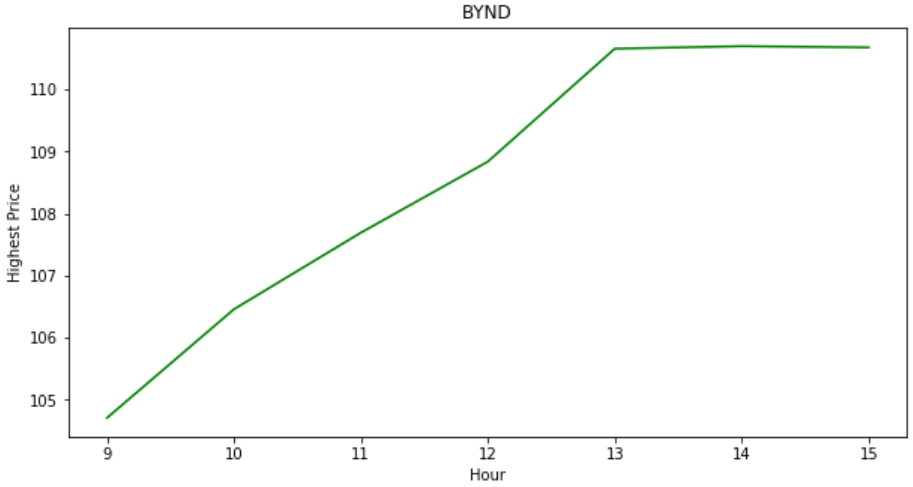
Out[83]:

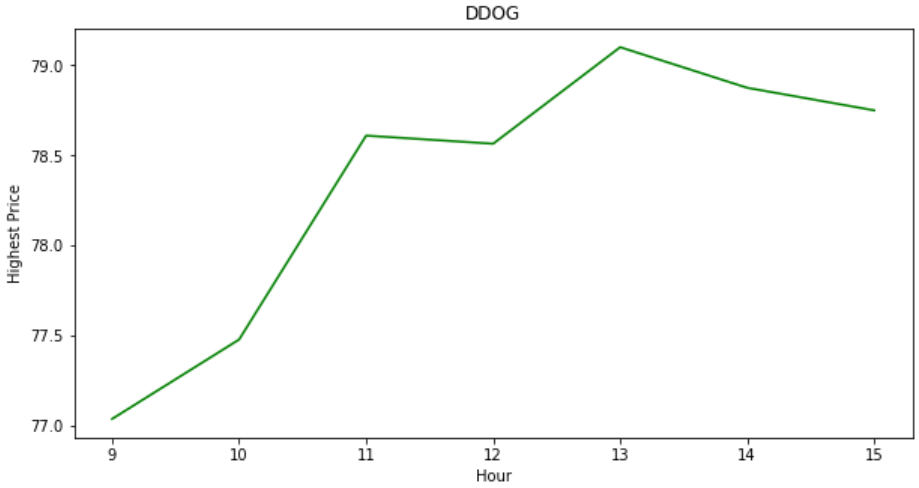
	name	hour	ts	highest_price
0	BYND	9	2021-05-11 09:55:00-04:00	104.709999
1	BYND	10	2021-05-11 10:55:00-04:00	106.460999
2	BYND	11	2021-05-11 11:55:00-04:00	107.695000
3	BYND	12	2021-05-11 12:55:00-04:00	108.839996
4	BYND	13	2021-05-11 13:45:00-04:00	110.660004
...	...	...	...	...
68	TTD	11	2021-05-11 11:50:00-04:00	494.500000
69	TTD	12	2021-05-11 12:00:00-04:00	491.440002
70	TTD	13	2021-05-11 13:35:00-04:00	497.220001
71	TTD	14	2021-05-11 14:45:00-04:00	508.669891
72	TTD	15	2021-05-11 15:50:00-04:00	515.531311

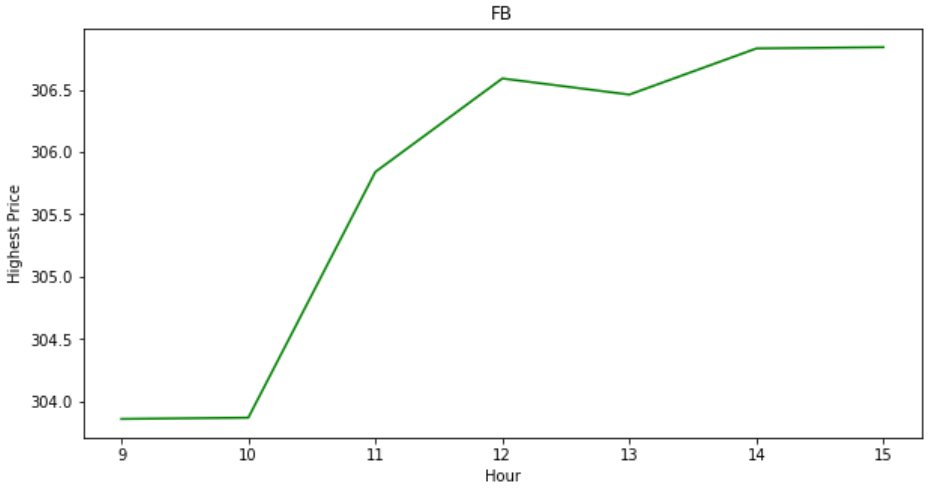
73 rows × 4 columns

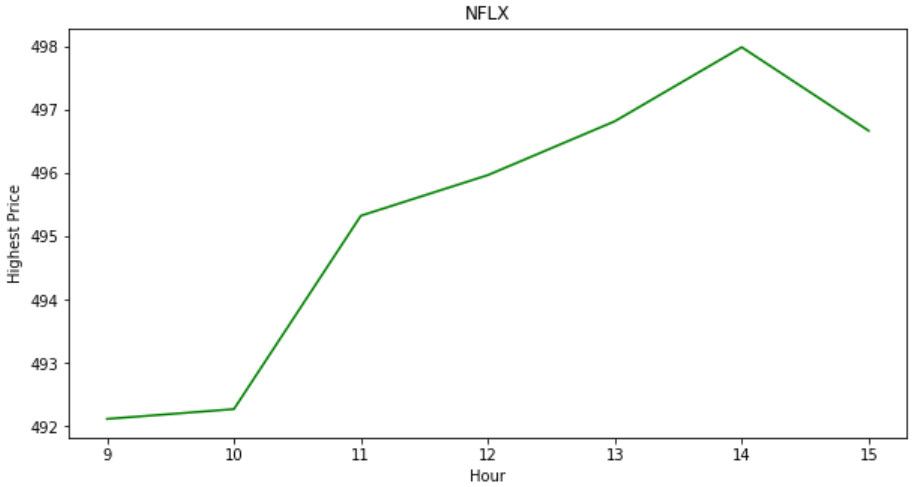
In [84]:
```
#Create a stock list
stock_list = dstock['name'].unique().tolist()
```

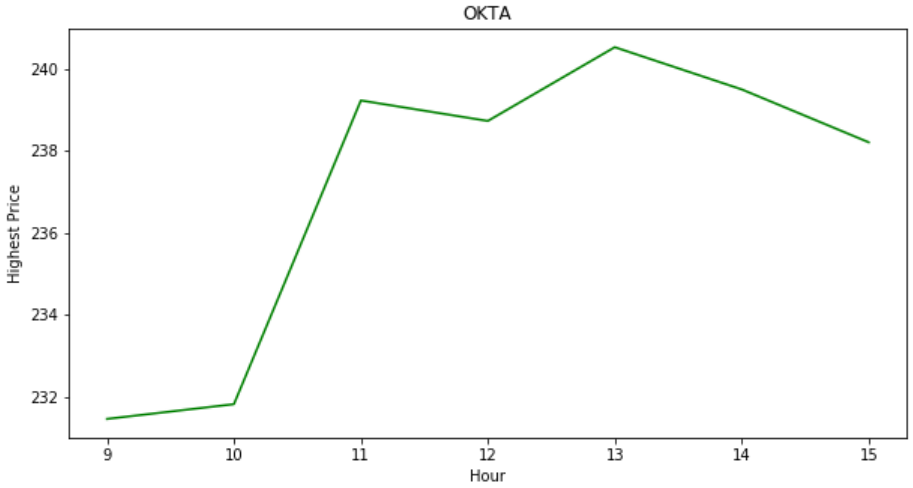
In [85]:
```
#Create graphes showing hourly highest price for each stock in the list
x = dstock['hour']
y = dstock['highest_price']

for stock in stock_list:
    df = dstock[dstock['name']==stock]
    x = df['hour']
    y = df['highest_price']
    plt.figure(figsize=(10,5))
    plt.plot(x,y,color='green')
    plt.title(f"{stock}")
    plt.xlabel("Hour")
    plt.ylabel("Highest Price")
    plt.show()
    print("\n")
```

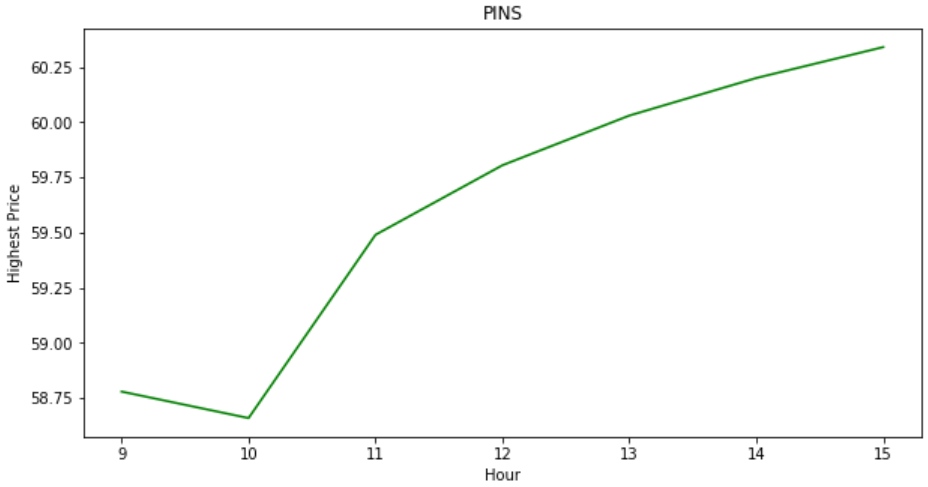


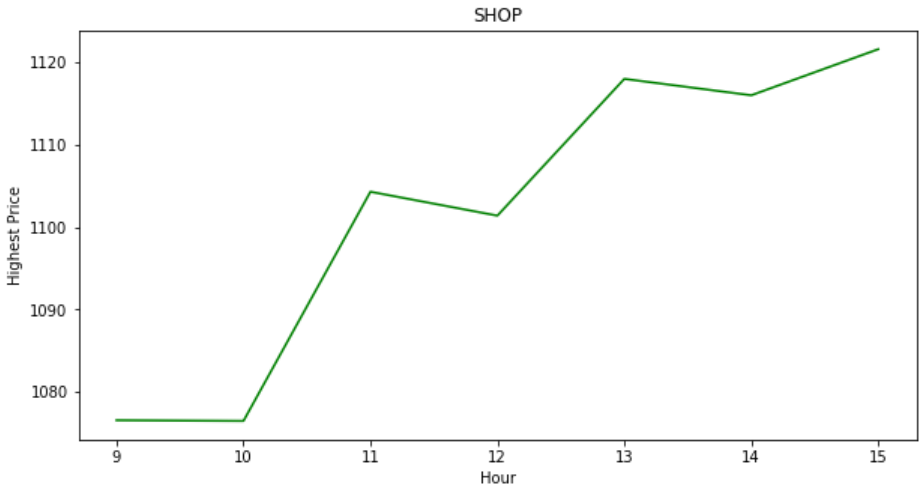

DDOG
Highest Price
79.0
78.5
78.0
77.5
77.0
9
10
11
12
13
14
15
Hour

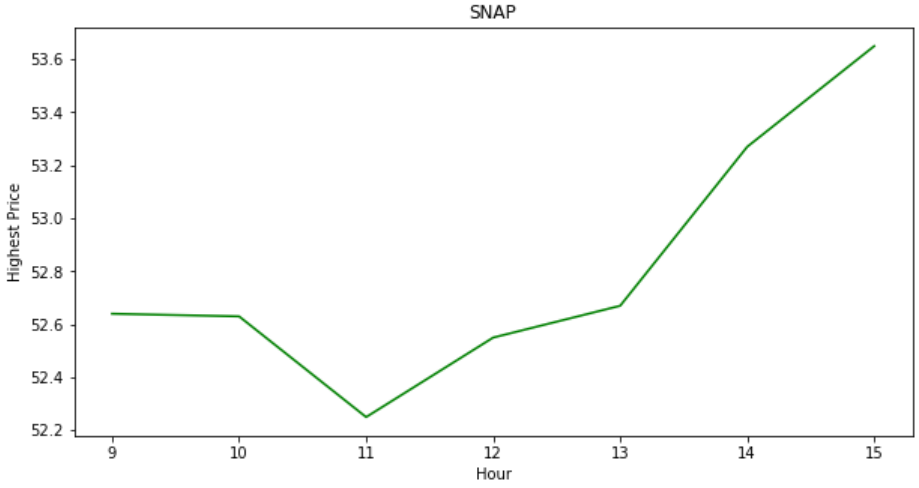

FB
Highest Price
306.5
306.0
305.5
305.0
304.5
304.0
9
10
11
12
13
14
15
Hour

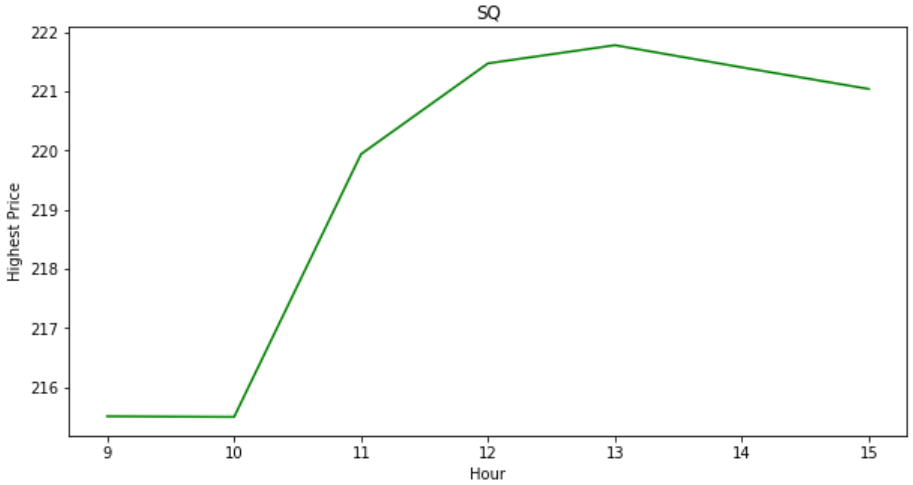

NFLX
Highest Price
498
497
496
495
494
493
492
9
10
11
12
13
14
15
Hour

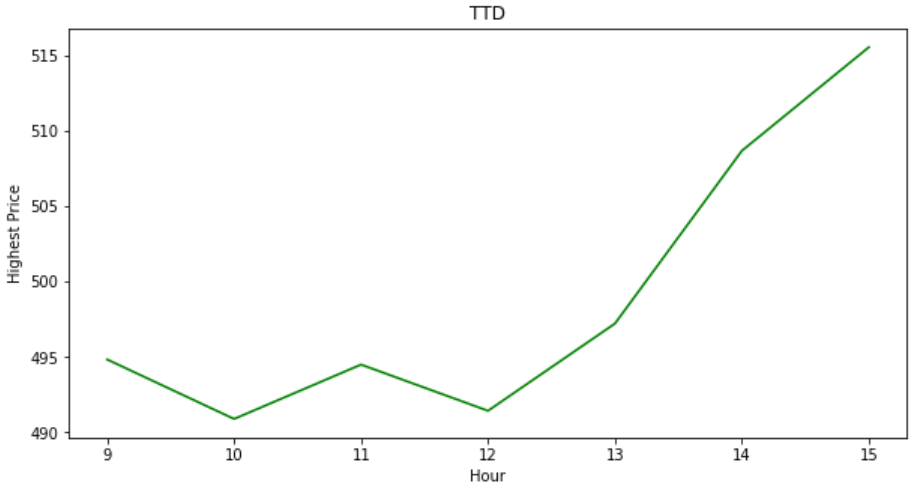

OKTA
Highest Price
240
238
236
234
232
9
10
11
12
13
14
15
Hour


PINS
Highest Price
60.25
60.00
59.75
59.50
59.25
59.00
58.75
9
10
11
12
13
14
15
Hour


SHOP
Highest Price
1120
1110
1100
1090
1080
9
10
11
12
13
14
15
Hour


SNAP
Highest Price
53.6
53.4
53.2
53.0
52.8
52.6
52.4
52.2
9
10
11
12
13
14
15
Hour


SQ
222
221
220
219
218
217
216
Highest Price
9
10
11
12
13
14
15
Hour



Average Stock Prices in The Stock List

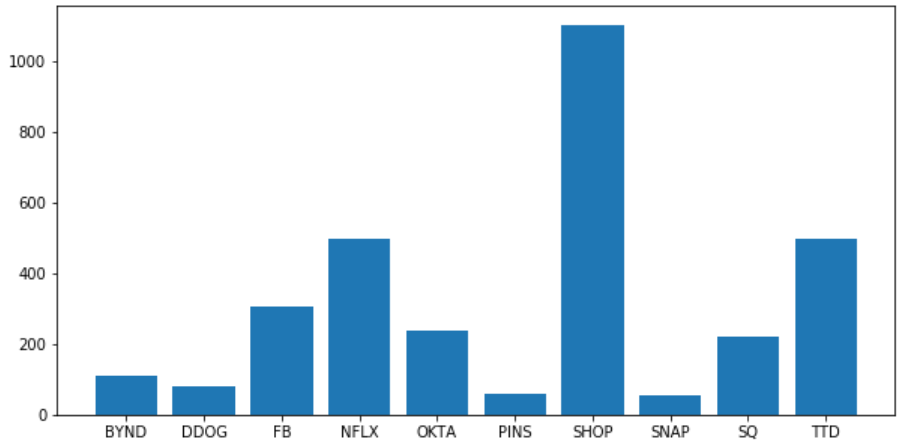
In [86]:
```
dict1={}
for stock in stock_list:
    average_price = dstock[dstock['name']==stock]['highest_price'].mean()
    print(f"Average Price of '{stock}' :", average_price)
    dict1[stock]=average_price
    print("\n")
```

```
Average Price of 'BYND' : 109.01622094048395


Average Price of 'DDOG' : 78.34571511404855


Average Price of 'FB' : 305.75561959402904


Average Price of 'NFLX' : 495.4805145263672


Average Price of 'OKTA' : 237.0685577392578


Average Price of 'PINS' : 59.61500004359654


Average Price of 'SHOP' : 1102.0514264787946


Average Price of 'SNAP' : 52.80857140677316


Average Price of 'SQ' : 219.52115522112166


Average Price of 'TTD' : 499.0144566127232
```

In [87]:
```
dict1
```

Out[87]:
```
{'BYND': 109.01622094048395,
 'DDOG': 78.34571511404855,
 'FB': 305.75561959402904,
 'NFLX': 495.4805145263672,
 'OKTA': 237.0685577392578,
 'PINS': 59.61500004359654,
 'SHOP': 1102.0514264787946,
 'SNAP': 52.80857140677316,
 'SQ': 219.52115522112166,
 'TTD': 499.0144566127232}
```

In [88]:
```
ind = np.arange(len(dict1))
plt.figure(figsize=(10,5))
plt.bar(ind, list(dict1.values()))
plt.xticks(ind, list(dict1.keys()))
plt.show()
```



In [ ]:
```
```