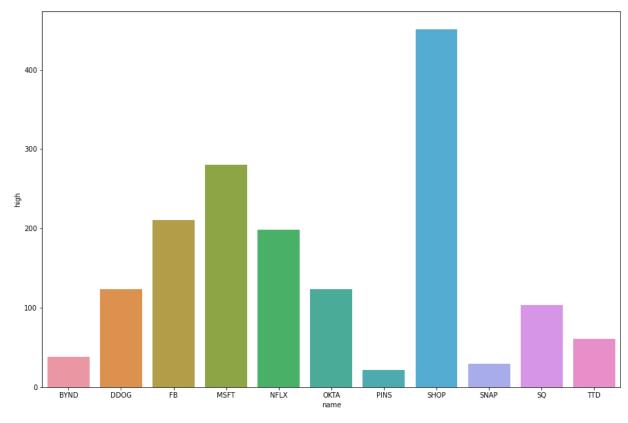
```
In [21]:
           import pandas as pd
           import seaborn as sns
           import matplotlib.pyplot as plt
In [22]:
           df=pd.read_csv('Results.csv')
In [23]:
           df
                          high hour
Out[23]:
              name
                                                      ts
           0 BYND
                     37.804901
                                      2022-05-02 09:55:00
                     37.990002
                                      2022-05-02 10:30:00
            1 BYND
                     37.590000
           2 BYND
                                  11
                                      2022-05-02 11:30:00
              BYND
                     37.330002
                                      2022-05-02 12:20:00
              BYND
                    36.570000
                                  13
                                      2022-05-02 13:05:00
          75
                TTD
                    60.979900
                                  12
                                      2022-05-02 12:20:00
          76
                TTD
                    59.939999
                                  13
                                      2022-05-02 13:00:00
          77
                TTD 59.939999
                                  13
                                      2022-05-02 13:10:00
          78
                    60.279999
                                      2022-05-02 14:50:00
                TTD
          79
                TTD
                     62.119999
                                      2022-05-02 15:55:00
         80 rows x 4 columns
In [26]:
           dff=df.loc[df['hour']==9]
           dff
Out[26]:
               name
                            high hour
                                                        ts
              BYND
                       37.804901
                                    9 2022-05-02 09:55:00
           0
           7
              DDOG
                     123.339996
                                      2022-05-02 09:55:00
           14
                 FΒ
                     210.729996
                                    9 2022-05-02 09:55:00
               MSFT 280.440002
                                      2022-05-02 09:55:00
                    198.600006
                                      2022-05-02 09:55:00
          28
               NFLX
                     123.349998
                                      2022-05-02 09:55:00
          35
               OKTA
          42
                PINS
                       21.240000
                                      2022-05-02 09:55:00
               SHOP
                     451.000000
                                      2022-05-02 09:40:00
          50
               SNAP
                       29.540001
                                       2022-05-02 09:50:00
          65
                      103.069901
                                    9 2022-05-02 09:55:00
                 SQ
```

name high hour ts

In [29]: plt.figure(figsize=(15,10))
 sns.barplot(x=dff2.index,y='high',data=dff)

Out[29]: <AxesSubplot:xlabel='name', ylabel='high'>



```
In [30]: df2=df.groupby(['name','hour']).max('high')
df2
```

Out[30]: high

name	hour	
BYND	9	37.804901
	10	37.990002
	11	37.590000
	12	37.330002
	13	36.570000
•••	•••	
TTD	11	60.639999
	12	60.979900
	13	59.939999
	14	60.279999
	15	62.119999

## 77 rows × 1 columns

```
In [32]:
           plt.figure(figsize=(15,10))
           sns.lineplot(y='high',x='hour',data=df2,hue='name')
Out[32]: <AxesSubplot:xlabel='hour', ylabel='high'>
                                                                                            BYND
                                                                                            DDOG
                                                                                            FB
                                                                                            MSFT
           400
                                                                                            NFLX
                                                                                            OKTA
                                                                                            PINS
                                                                                            SHOP
                                                                                            SNAP
                                                                                            SO
                                                                                            TTD
           300
          high
           200
           100
In [33]:
           dfs=df.groupby('name').min('ts')
In [34]:
           dfe=df.groupby('name').max('ts')
In [35]:
           dfoc=pd.concat([dfs, dfe], axis=0)
In [36]:
           dfoc
                       high hour
Out[36]:
           name
          BYND
                  36.570000
                                9
          DDOG
                 118.309998
                                9
                204.809998
           MSFT 280.204987
                                9
```

In [38]:

	high	hour
name		
NFLX	196.089996	9
ОКТА	121.695099	9
PINS	21.219999	9
SHOP	439.519897	9
SNAP	28.969999	9
SQ	102.370003	9
TTD	59.939999	9
BYND	38.330002	15
DDOG	123.339996	15
FB	211.880005	15
MSFT	284.940002	15
NFLX	200.214096	15
OKTA	124.004997	15
PINS	22.275000	15
SHOP	454.140015	15
SNAP	29.540001	15

```
sns.barplot(x=dfoc.index,y='high',data=dfoc,hue='hour')
```

Out[38]: <AxesSubplot:xlabel='name', ylabel='high'>

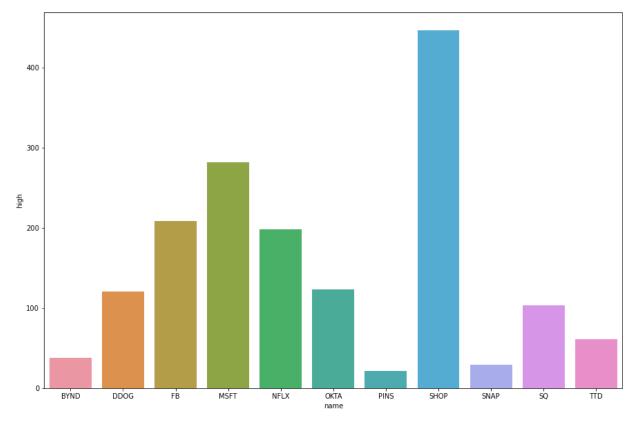
```
9
15
In [39]:
           dfa=df.groupby(['name','hour']).max('high')
In [40]:
           dfa
Out[40]:
                           high
          name hour
                   9 37.804901
          BYND
                  10 37.990002
                   11 37.590000
                  12 37.330002
                      36.570000
           TTD
                  11 60.639999
                  12 60.979900
                  13 59.939999
                  14 60.279999
                  15 62.119999
         77 rows × 1 columns
In [41]:
           dfa=dfa.groupby('name').mean('high')
In [42]:
           dfa
Out[42]:
                      high
          name
                  37.509272
          BYND
          DDOG 120.444085
                 208.667143
          MSFT
                 281.707851
          NFLX 198.579099
          OKTA 122.836442
           PINS
                  21.485714
          SHOP 446.482130
                  29.311429
          SNAP
```

## high

## name

```
plt.figure(figsize=(15,10))
sns.barplot(x=dfa.index,y='high',data=dfa)
```

Out[43]: <AxesSubplot:xlabel='name', ylabel='high'>



In []: