The cell below allows the user to enter a comma-separated string of tickers that will be analyzed.

In addition to this, the user can decide which price should be analyzed. The options are: Open, High, Low, Close, Adj Close, Volume.

```
In [19]: import pandas.io.data as pweb
         import datetime
         import requests
         import numpy
         import seaborn
         import matplotlib.pyplot as plt
         %matplotlib auto
         start = datetime.datetime(2016,1,1)
         end = datetime.datetime(2016,12,16)
         ticker = []
         inputString = input("Input the Stocks, separate each stock by ',': ")
         ticker = inputString.split(",")
         price = input('\nEnter which price you want to analyze - Open/High/Low/C
         lose/Adj Close/Volume: ')
         data = pweb.get data yahoo(ticker,start,end)[(price)]
         quote = pweb.get quote yahoo(ticker)
         info = {}
         for tick in ticker:
             info[tick] = {}
             info[tick]["PE"] = quote.loc[tick,"PE"]
             info[tick]["change pct"] = quote.loc[tick, "change pct"]
             info[tick]["last"] = quote.loc[tick,"last"]
             info[tick]["short_ratio"] = quote.loc[tick, "short_ratio"]
         Using matplotlib backend: Qt4Agg
```

Input the Stocks, separate each stock by ',': AAPL,FB,MSFT Enter which price you want to analyze - Open/High/Low/Close/Adj Close/V olume: Adj Close

Shows the selected price of each stock over the past 5 days.

In [20]: data.tail()

Out[20]:

	AAPL	FB	MSFT	
Date				
2016-12-12	113.300003	117.769997	62.169998	
2016-12-13	115.190002	120.309998	62.980000	
2016-12-14	115.190002	120.209999	62.680000	
2016-12-15	115.820000	120.570000	62.580002	
2016-12-16	115.970001	119.870003	62.299999	

## Additional information about each stock

In [21]: quote

Out[21]:

	PE	change_pct	last	short_ratio	time
AAPL	13.96	0.13	115.97	1.73	4:00pm
FB	46.28	-0.58	119.87	0.83	4:00pm
MSFT	29.53	-0.45	62.30	1.77	4:00pm

```
In [13]: seaborn.factorplot(x=ticker, y='PE', data=quote, kind='bar', ci=None)
         plt.xlabel('Stock Ticker')
         plt.ylabel('PE Ratio')
```

Out[13]: <matplotlib.text.Text at 0x1637b10c898>

## **Earnings per Share**

```
In [23]: d = datetime.datetime(2016,12,16)
         data.ix[d]
         print("Earnings per Share \n")
         for tick in ticker:
             print(tick,":",data.ix[d][tick]/info[tick]["PE"])
             info[tick]["EPS"] = data.ix[d][tick]/info[tick]["PE"]
```

Earnings per Share

AAPL: 8.30730666189 FB: 2.59010378133 MSFT: 2.10971889604

## Historical price of stocks

```
In [24]: data.plot()
    plt.xlabel("Date")
    plt.ylabel("Price")
    plt.title("Historical Data of Stocks")
Out[24]: <matplotlib.text.Text at 0x1637c424160>
```

## Allows the user to order the stocks by: PE, EPS, change\_pct, last, short\_ratio

```
In [26]: field = input("Choose a field to order by: ")
    print("\nTicker :", field, "\n")
    ordered = sorted(info.items(), key = lambda tup: (-tup[1][field]))
    for i in ordered:
        print(i[0],":", i[1][field])

Choose a field to order by: short_ratio

Ticker : short_ratio

MSFT : 1.77
    AAPL : 1.73
    FB : 0.83
In []:
```