

Output:

1:

Mean Open: 50.86385220906213

Mean High: 51.459411725747884

Mean Low: 50.25336771426483

Mean Close: 50.876481580135426

2:

Top 5 by close stockname

FTR 8.969515

F 11.174158

XRX 11.291864

ETFC 12.808103

HBAN 13.697483

Name: Close, dtype: float64

Bottom 5 by close stockname

CME 253.956017

AZO 235.951950

AMZN 185.140534

BLK 164.069088

GS 139.146781

Name: Close, dtype: float64

3:

Top 5 by volatility stockname

FTR 0.205275

XRX 0.308743

F 0.323567

HBAN 0.343893

NI 0.363250

Name: volatility, dtype: float64

Bottom 5 by volatility stockname

CME 7.697287

AMZN 4.691407

BLK 4.470693

AZO 4.330294

ICE 4.056189

Name: volatility, dtype: float64

4:

Top 5 by relative volatility stockname

GIS 0.013966

PG 0.014192

K 0.014992

CL 0.015521

WEC 0.015761

Name: relVolatility, dtype: float64

Bottom 5 by relative volatility stockname

AAL 0.055533

LVL 0.054870

EQIX 0.051295

REGN 0.048172

ETFC 0.045381

Name: relVolatility, dtype: float64

5:

Average daily price for all stocks for each category in each day February 2010

Open

	High	Low	Close	Volume
Date				
2010-02-01	42.267199	42.935162	41.912471	42.704181 7.200101e+06
2010-02-02	42.573926	43.308290	42.178253	43.083780 7.996646e+06
2010-02-03	43.074528	43.519709	42.596412	42.996122 7.173997e+06
2010-02-04	42.869744	43.069415	41.666130	41.799597 9.732287e+06
2010-02-05	41.487291	41.987255	40.569602	41.628338 1.075256e+07
2010-02-08	41.954153	42.400403	41.349668	41.565881 7.132838e+06
2010-02-09	41.371208	41.952746	40.934578	41.500219 7.972704e+06
2010-02-10	41.783087	42.167315	41.212389	41.722352 6.744782e+06
2010-02-11	41.814452	42.595182	41.417809	42.391167 7.037806e+06
2010-02-12	41.403247	41.989561	41.018028	41.823831 7.246792e+06
2010-02-16	42.663708	43.217454	42.331781	43.075126 6.649753e+06
2010-02-17	43.571721	43.954541	43.134688	43.627508 6.623697e+06
2010-02-18	43.396970	43.983284	43.125218	43.769598 6.460454e+06
2010-02-19	43.390687	44.013586	43.154311	43.704347 6.660305e+06
2010-02-22	44.004548	44.280432	43.455306	43.785487 6.427562e+06
2010-02-23	43.152945	43.468508	42.491308	42.754581 7.270832e+06
2010-02-24	43.480865	44.004945	43.167400	43.755306 6.697727e+06
2010-02-25	43.201386	43.893284	42.772043	43.771350 7.895413e+06
2010-02-26	43.703560	44.084712	43.281258	43.767877 7.223996e+06

6:

2012-12-24 00:00:00 had the smallest average volatility: [ 0.01357891]

2012-06-21 00:00:00 had the largest average volatility: [ 0.03360574]

7:

Monday had an average relative volatility of [ 0.02854191]

Tuesday had an average relative volatility of [ 0.02943646]

Wednesday had an average relative volatility of [ 0.02976601]

Thursday had an average relative volatility of [ 0.03106583]

Friday had an average relative volatility of [ 0.02904062]

8:

Python index for each category in each day of october 2010

	Open	High	Low	Close
Date				
2010-10-01	39.272779	39.540464	38.574467	38.961689
2010-10-04	36.513664	36.973598	36.039906	36.473198
2010-10-05	36.868819	37.448798	36.515236	37.154517
2010-10-06	40.069422	40.526281	38.790438	39.453984
2010-10-07	38.738979	38.982299	38.023149	38.494185
2010-10-08	33.953131	34.418515	33.601610	34.141493
2010-10-11	36.415035	36.840357	35.996804	36.331342
2010-10-12	36.550699	37.148552	36.185750	36.956121
2010-10-13	36.769845	37.277431	36.410377	36.830507
2010-10-14	31.929174	32.188759	31.399433	31.746258
2010-10-15	31.379396	31.574286	30.611508	31.058207

2010-10-18	34.735203	35.208943	34.389509	34.947873
2010-10-19	33.418144	33.812511	32.833834	33.171654
2010-10-20	33.225863	33.908320	32.849706	33.555329
2010-10-21	40.968005	41.634092	40.219655	40.945613
2010-10-22	40.206448	40.821101	39.843407	40.424731
2010-10-25	35.196479	35.525335	34.779042	35.002647
2010-10-26	37.425957	38.443149	37.176602	38.095958
2010-10-27	40.800620	41.430831	40.293345	40.981265
2010-10-28	38.377249	38.645428	37.617353	38.085284
2010-10-29	40.159713	40.638799	39.741861	40.279059