In [1]:
```
from __future__ import print_function

import pandas as pd
pd.__version__
```

Out[1]:
```
'0.20.3'
```

In [35]:
```
#read econoemeic date
ecnm_dataframe = pd.read_csv("ml_data_all.csv", sep=",")

ecnm_dataframe.describe()
```

Out[35]:

	y	m	d	tw_Open	tw_High	tw_Low	tw_Cl
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000
mean	2007.523433	6.667502	15.813693	7523.724336	7566.244759	7468.191440	7513.696
std	6.080406	3.397438	8.707791	1656.577972	1654.319321	1655.296814	1654.134
min	1997.000000	1.000000	1.000000	3475.870117	3511.379883	3411.679932	3446.260
25%	2002.000000	4.000000	8.000000	6194.899902	6231.879883	6151.509766	6190.830
50%	2008.000000	7.000000	16.000000	7712.029785	7752.089844	7657.879883	7698.240
75%	2013.000000	10.000000	23.000000	8702.959961	8753.049805	8651.540039	8702.330
max	2018.000000	12.000000	31.000000	11243.589844	11270.179688	11201.519531	11253.110

8 rows × 78 columns

In [37]:
```
ecnm_dataframe = pd.read_csv("ml_data_1.csv", sep=",")
ecnm_dataframe.describe()
```

Out[37]:

	y	m	d	tw_Open	tw_High	tw_Low	tw_Cl
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000
mean	2007.523433	6.667502	15.813693	7523.724336	7566.244759	7468.191440	7513.696
std	6.080406	3.397438	8.707791	1656.577972	1654.319321	1655.296814	1654.134
min	1997.000000	1.000000	1.000000	3475.870117	3511.379883	3411.679932	3446.260
25%	2002.000000	4.000000	8.000000	6194.899902	6231.879883	6151.509766	6190.830
50%	2008.000000	7.000000	16.000000	7712.029785	7752.089844	7657.879883	7698.240
75%	2013.000000	10.000000	23.000000	8702.959961	8753.049805	8651.540039	8702.330
max	2018.000000	12.000000	31.000000	11243.589844	11270.179688	11201.519531	11253.110

In [38]:
```
ecnm_dataframe = pd.read_csv("ml_data_2.csv", sep=",")
ecnm_dataframe.describe()
```

Out[38]:

	jp_Adj_Close	chnsse_Open	chnsse_Adj_Close	chnhs_Open	chnhs_Adj_Close	ko_Open
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000
mean	13956.776500	2286.892600	2288.691177	18179.736088	18170.989721	1401.437752
std	3928.607516	930.110099	931.440056	5786.794855	5779.314579	623.131984
min	1144.916000	1007.901000	1011.499000	6649.450000	6660.420000	283.410000
25%	10373.460000	1519.932000	1520.551000	13212.350000	13221.330000	785.980000
50%	14037.840000	2113.328000	2114.447000	18910.881000	18903.199000	1449.720000
75%	16921.770000	2947.511000	2949.144000	22726.590000	22704.500000	1968.770000
max	24124.150000	6057.428000	6092.057000	33335.480000	33154.121000	2590.410000

In [39]:
```
ecnm_dataframe = pd.read_csv("ml_data_3.csv", sep=",")
ecnm_dataframe.describe()
```

Out[39]:

	ind_Adj_Close	astsp_Open	astsp_Adj_Close	ast_Open	ast_Adj_Close	usdow_Open	us
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	
mean	14004.423691	4355.374359	4355.975661	4370.731668	4371.259315	12640.645705	
std	9513.558899	1115.210296	1115.495292	1125.902832	1126.205660	4087.732783	
min	2600.120000	2260.900000	2260.900000	2299.200000	2299.200000	6547.010000	
25%	4487.870000	3298.500000	3299.600000	3261.050000	3261.700000	10061.430000	
50%	14042.320000	4457.400000	4456.300000	4458.800000	4459.400000	11065.150000	
75%	19900.961000	5317.500000	5318.400000	5333.900000	5332.900000	14618.590000	
max	37606.578000	6794.500000	6828.700000	6811.100000	6853.600000	26584.279000	

In [48]:
```
ecnm_dataframe = pd.read_csv("ml_data_4.csv", sep=",")
ecnm_dataframe.describe()
```

Out[48]:

	usvix_Adj_Close	ussp_Open	ussp_Adj_Close	eurestx_Open	eurestx_Adj_Close	blx_Op
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.0000
mean	20.343574	1435.287573	1435.540589	3241.243799	3241.243799	3000.3754
std	8.486759	463.971457	464.029944	709.804245	709.804245	676.7214
min	9.140000	679.280000	676.530000	1809.980000	1809.980000	1450.3700
25%	14.010000	1121.060000	1120.800000	2719.130000	2719.130000	2485.1900
50%	18.740000	1299.540000	1299.290000	3113.160000	3113.160000	2962.4600
75%	24.180000	1568.610000	1569.190000	3621.370000	3621.370000	3502.1400
max	80.860000	2867.230000	2872.870000	5464.430000	5464.430000	4737.3200

In [47]:
```
ecnm_dataframe = pd.read_csv("ml_data_5.csv", sep=",")
ecnm_dataframe.describe()
```

Out[47]:

	grm_Adj Close	cnd_Open	cnd_Adj_Close	mxc_Open	mxc_Adj_Close	agt_Open	ag
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	
mean	6830.039517	11075.101533	11072.720116	24894.495662	24903.206390	4691.892147	
std	2614.917368	3014.133095	3013.368005	16105.253057	16107.008416	7086.025664	
min	2202.960000	5343.800000	5398.100000	2859.290000	2856.100000	199.640000	
25%	4915.950000	8088.700000	8119.400000	6863.560000	6860.260000	670.460000	
50%	6210.320000	11682.800000	11673.050000	26647.561000	26664.449000	1912.020000	
75%	8008.215000	13582.500000	13578.700000	40802.949000	40828.852000	3473.400000	
max	13559.600000	16560.900000	16567.400000	51590.480000	51713.379000	35141.719000	3

In [42]:
```
ecnm_dataframe = pd.read_csv("ml_data_6.csv", sep=",")
ecnm_dataframe.describe()
```

Out[42]:

	bx_Adj_Close	lsrl_Open	lsrl_Adj_Close	tw_VALUE	jp_VALUE	chn_VALUE	chnhk_V
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.0
mean	40029.512054	843.659321	843.359281	31.895253	108.182762	7.350008	7.7
std	22231.668759	366.322911	365.979640	1.714561	14.335977	0.866102	0.0
min	4761.000000	249.190000	249.190000	27.870000	75.720000	6.040200	7.7
25%	15395.000000	466.370000	466.300000	30.350000	101.340000	6.503200	7.7
50%	45483.000000	925.920000	926.870000	32.103000	109.890000	7.261500	7.7
75%	58620.000000	1166.260000	1164.810000	33.080000	118.650000	8.277000	7.7
max	87653.000000	1503.080000	1502.080000	35.210000	147.140000	8.322000	7.8

In [44]:
```
ecnm_dataframe = pd.read_csv("ml_data_7.csv", sep=",")
ecnm_dataframe.describe()
```

Out[44]:

	ko_VALUE	mlx_VALUE	mxc_VALUE	sd_VALUE	nafrc_VALUE	sgp_VALUE	sz_VALUE
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.00000
mean	1137.437688	3.625038	12.295924	7.820242	8.633177	1.508732	1.19910
std	126.282884	0.369123	3.025701	1.110366	2.655115	0.191131	0.25972
min	889.000000	2.489000	7.717200	5.834600	4.525000	1.200700	0.72960
25%	1065.130000	3.287500	10.168000	6.886300	6.727500	1.347500	0.97080
50%	1133.000000	3.780000	11.301000	7.765100	7.716500	1.484300	1.15660
75%	1194.600000	3.800000	13.240100	8.475100	10.357500	1.695900	1.39050
max	1960.000000	4.730000	21.891000	11.027000	16.884500	1.854000	1.82500

In [45]:
```
ecnm_dataframe = pd.read_csv("ml_data_8.csv", sep=",")
ecnm_dataframe.describe()
```

Out[45]:

	uk_VALUE	RDSCUNT_RATE	RATE_YEAR	RATE	BOND_RATE	PRP_M	PR
count	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185.000000	5185
mean	1.614399	2.438742	2.283491	4.344403	2.554289	22966.404822	9646
std	0.184297	1.250219	1.617871	1.996845	1.684247	7693.408952	4177
min	1.211800	1.250000	0.770000	2.563000	0.660000	13573.000000	5068
25%	1.501200	1.500000	1.280000	2.857000	1.380000	16262.000000	5857
50%	1.601500	1.875000	1.400000	3.478000	1.850000	20112.000000	8159
75%	1.689200	3.125000	2.540000	7.225000	2.980000	29401.000000	12893
max	2.110400	5.250000	6.530000	7.955000	6.700000	39993.000000	20084

In [46]:
```
ecnm_dataframe = pd.read_csv("ml_data_9.csv", sep=",")
ecnm_dataframe.describe()
```

Out[46]:

	PUR_A	ASSETS	LIABILITIES
count	5185.000000	5185.000000	5185.000000
mean	103651.689489	120249.409257	16597.719769
std	48327.127806	55605.761979	7887.788735
min	26101.000000	31400.000000	4027.000000
25%	63549.000000	70726.000000	7311.000000
50%	96666.000000	117205.000000	18931.000000
75%	136094.000000	156243.000000	22202.000000
max	185452.000000	210266.000000	32963.000000

In [*]:

In [ ]: