

```
In [42]: #import pandas library
import pandas as pd
file = pd.read_csv("https://raw.githubusercontent.com/collegefoundation/stock-an
print(file)
```

	Name	Price	Day Price	Change	Change %	\
0	Reliance Industries	1,234.85		-18.80	-1.50%	
1	Tata Consultancy Services	3,963.55		-73.40	-1.82%	
2	HDFC Bank	1,701.40		-14.35	-0.84%	
3	Bharti Airtel	1,696.75		3.70	0.22%	
4	ICICI Bank	1,252.75		-9.85	-0.78%	
..	
70	Godrej Consumer Products	1,071.25		-20.00	-1.83%	
71	Rural Electrification Corporation	409.95		-13.50	-3.19%	
72	Bank of Baroda	210.78		-4.45	-2.07%	
73	GAIL	161.69		-6.41	-3.81%	
74	Torrent Pharmaceuticals	3,106.50		-86.40	-2.71%	

	Volume	P/E Ratio	Market Cap	SMA (5)	FII Holding	\
0	88,59,714.00	24.51	16,96,485.90	1,262.99	19.15	
1	18,10,908.00	29.94	14,60,603.80	4,040.75	12.68	
2	1,13,62,352.00	18.86	13,12,157.50	1,726.31	49.20	
3	89,65,266.00	49.67	9,64,333.00	1,669.35	24.27	
4	65,86,627.00	18.13	8,91,145.60	1,262.47	45.69	
..	
70	5,99,851.00	64.73	1,11,635.70	1,101.52	20.68	
71	1,14,22,600.00	7.12	1,11,503.90	429.80	21.73	
72	56,69,659.00	5.45	1,11,303.20	216.41	8.91	
73	1,95,20,499.00	10.49	1,10,527.40	171.75	16.05	
74	2,12,638.00	57.99	1,08,062.20	3,166.79	16.17	

	Return on Equity	Return On Assets	Market Cap/Sales	\
0	8.54	5.82	1.88	
1	50.48	45.94	6.06	
2	13.93	1.62	4.63	
3	8.11	2.80	6.43	
4	16.67	1.90	5.59	
..	
70	-4.45	-4.34	7.92	
71	20.40	2.81	2.35	
72	15.25	1.11	0.94	
73	12.83	9.61	0.83	
74	24.16	17.19	10.07	

	YoY last Quarterly Sales Growth	YoY last Quarterly Profit Growth	\
0	6.62	11.65	
1	5.60	12.14	
2	9.01	3.51	
3	19.08	460.93	
4	15.10	20.25	
..	
70	3.49	-14.25	
71	18.42	23.21	
72	8.41	9.04	
73	6.16	27.90	
74	2.64	13.54	

	EBITDA Growth % (Year)
0	15.85
1	9.58
2	24.77
3	10.41
4	30.56
..	...
70	23.61

```

71                27.29
72                21.66
73                73.62
74                18.65

```

[75 rows x 15 columns]

```
In [19]: # to display information
file.info()
```

```

<class 'pandas.core.frame.DataFrame'>
RangeIndex: 101 entries, 0 to 100
Data columns (total 18 columns):
#   Column                                Non-Null Count  Dtype
---  ---                                -
0   Name                                  101 non-null    object
1   Price                                101 non-null    object
2   Day Price Change                     101 non-null    float64
3   Change %                             101 non-null    object
4   Volume                               101 non-null    object
5   PE Ratio (TTM)                       101 non-null    object
6   Market Cap                           101 non-null    object
7   FII Holding                          101 non-null    float64
8   PE/Sector PE                         101 non-null    float64
9   Dividend Per Share                   101 non-null    object
10  Promoter Holding                     101 non-null    float64
11  DII Holding                          101 non-null    float64
12  DII Holding Change %                 101 non-null    float64
13  FII Holding Change %                 101 non-null    float64
14  Retail Investor Holding              101 non-null    float64
15  Revenue (Quarterly)                  101 non-null    object
16  Dividend Yield                       101 non-null    float64
17  EBITDA (Quarterly)                   101 non-null    object
dtypes: float64(9), object(9)
memory usage: 14.3+ KB

```

```
In [99]: # to show Top 10 companies of India accordting to market cap.
file.head(10)
```

Out[99]:

	Name	Price	Day Price Change	Change %	Volume	P/E Ratio	Market Cap	SMA (5)
0	Reliance Industries	1,234.85	-18.80	-1.50%	88,59,714.00	24.51	16,96,485.90	1,262.99
1	Tata Consultancy Services	3,963.55	-73.40	-1.82%	18,10,908.00	29.94	14,60,603.80	4,040.75
2	HDFC Bank	1,701.40	-14.35	-0.84%	1,13,62,352.00	18.86	13,12,157.50	1,726.31
3	Bharti Airtel	1,696.75	3.70	0.22%	89,65,266.00	49.67	9,64,333.00	1,669.35
4	ICICI Bank	1,252.75	-9.85	-0.78%	65,86,627.00	18.13	8,91,145.60	1,262.47
5	Infosys	1,875.65	-4.65	-0.25%	44,11,601.00	28.22	7,80,751.20	1,894.46
6	State Bank of India	731.10	-5.70	-0.77%	1,30,17,060.00	8.29	6,57,566.00	744.68
7	Hindustan Unilever	2,315.25	-46.20	-1.96%	13,89,260.00	53.64	5,54,844.20	2,360.86
8	ITC	418.30	-8.90	-2.08%	1,42,88,751.00	26.91	5,34,500.30	433.12
9	Bajaj Finance	8,191.20	NaN	8,393.80	20.79	18.84	4.23	9.33



In [25]: *# to show last 10 records*
 file.tail(10)

Out[25]:

	Name	Price	Day Price Change	Change %	Volume	PE Ratio (TTM)	Market Cap	FII Holding	F
91	Bosch	28,689.25	-39.90	-0.14%	9,383.00	41.86	84,615.04	6.14	
92	Canara Bank	92.62	-0.65	-0.70%	1,62,82,476.00	5.15	84,012.37	11.11	
93	JSW Energy	472	-36.60	-7.20%	57,69,497.00	46.96	82,494.67	14.56	
94	NHPC	78.84	-1.71	-2.12%	2,75,42,115.00	27.09	79,195.05	8.78	
95	Jindal Steel	776.35	-15.20	-1.92%	42,62,499.00	19.77	79,194.54	10.99	
96	Indusind Bank	1,009.40	18.20	1.84%	60,54,296.00	10.66	78,637.48	24.74	
97	Adani Total Gas	634.75	-8.35	-1.30%	7,45,119.00	106.02	69,810.45	13.06	
98	Bharat Heavy Electricals	200.02	-8.07	-3.88%	2,48,72,103.00	139.7	69,648.23	7.98	
99	IRCTC	794.7	-27.60	-3.36%	39,90,832.00	54.69	63,576.00	7.45	
100	ITC Hotels	170.75	7.80	4.79%	66,95,119.00	-	35,536.00	24.35	

In [27]: `# to shaw the datatype of all column`
`file.dtypes`

Out[27]:

Name	object
Price	object
Day Price Change	float64
Change %	object
Volume	object
PE Ratio (TTM)	object
Market Cap	object
FII Holding	float64
PE/Sector PE	float64
Dividend Per Share	object
Promoter Holding	float64
DII Holding	float64
DII Holding Change %	float64
FII Holding Change %	float64
Retail Investor Holding	float64
Revenue (Quarterly)	object
Dividend Yield	float64
EBITDA (Quarterly)	object
dtype:	object

In [63]: `#to check missing values in specific column`
`file.isnull().sum()`

```
Out[63]: Name      0
        Price      0
        Day Price Change  1
        Change %    0
        Volume      0
        P/E Ratio    0
        Market Cap   0
        SMA (5)      0
        FII Holding  0
        Return on Equity  0
        Return On Assets  0
        Market Cap/Sales  1
        YoY last Quarterly Sales Growth  1
        YoY last Quarterly Profit Growth  1
        EBITDA Growth % (Year)  1
        dtype: int64
```

```
In [95]: #to drop missing value records
        file_after_drop = file.dropna()
        print(file_after_drop)
```

	Name	Price	Day Price	Change	Change %	\
0	Reliance Industries	1,234.85		-18.80	-1.50%	
1	Tata Consultancy Services	3,963.55		-73.40	-1.82%	
2	HDFC Bank	1,701.40		-14.35	-0.84%	
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2	1,13,62,352.00	18.86	13,12,157.50	1,726.31	49.20	
3	89,65,266.00	49.67	9,64,333.00	1,669.35	24.27	
4	65,86,627.00	18.13	8,91,145.60	1,262.47	45.69	
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1	50.48	45.94	6.06	
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..	
70	-4.45	-4.34	7.92	
71	20.40	2.81	2.35	
72	15.25	1.11	0.94	
73	12.83	9.61	0.83	
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70	3.49	-14.25	
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```

71          27.29
72          21.66
73          73.62
74          18.65

```

[74 rows x 15 columns]

```
In [67]: #basic statistical analysis for numeric columns only for numerical column
file.describe()
```

Out[67]:

	Day Price Change	P/E Ratio	FII Holding	Return on Equity	Return On Assets	Market Cap/Sales
count	74.000000	75.000000	75.000000	75.000000	75.000000	74.000000
mean	-34.191351	42.302000	18.832267	25.102933	12.343600	7.598919
std	60.961800	42.746844	10.472097	47.875983	11.775592	13.255192
min	-363.000000	5.450000	0.070000	-5.310000	-4.340000	0.220000
25%	-36.175000	18.485000	11.760000	11.660000	2.805000	1.732500
50%	-11.075000	29.940000	17.350000	15.830000	9.480000	4.665000
75%	-5.075000	56.565000	24.360000	23.905000	18.915000	8.512500
max	31.600000	329.200000	49.200000	409.350000	59.890000	83.260000

```
In [71]: #basic statistical analysis for numeric columns only for all column
file.describe(include='all')
```

Out[71]:

	Name	Price	Day Price Change	Change %	Volume	P/E Ratio	Market Cap
count	75	75	74.000000	75	75	75.000000	75
unique	75	75	NaN	71	75	NaN	75
top	Reliance Industries	1,234.85	NaN	-2.70%	88,59,714.00	NaN	16,96,485.90
freq	1	1	NaN	2	1	NaN	1
mean	NaN	NaN	-34.191351	NaN	NaN	42.302000	NaN
std	NaN	NaN	60.961800	NaN	NaN	42.746844	NaN
min	NaN	NaN	-363.000000	NaN	NaN	5.450000	NaN
25%	NaN	NaN	-36.175000	NaN	NaN	18.485000	NaN
50%	NaN	NaN	-11.075000	NaN	NaN	29.940000	NaN
75%	NaN	NaN	-5.075000	NaN	NaN	56.565000	NaN
max	NaN	NaN	31.600000	NaN	NaN	329.200000	NaN

In []: