Financial Data Analysis in Python

Yuvraj Patel

Introduction

- We have been given the data of 499 companies which include their Market Capitalization along with their Sales Qtr figures.

- We have been asked to analyze the data and come up with our own findings along with meaningful relationships

Basic Figures

- We can use the inbuilt methods of dataframes to get the basic figures regarding the data.

- This data includes figures like count, mean, Std deviation, quartiles and minimum & maximum.

- Useful for getting a rough idea of the data we're dealing with.

	Mar Cap - Crore	Sales Qtr - Crore
count	459.000000	459.000000
mean	28870.974139	3807.789412
std	60557.081792	9989.449987
min	3017.070000	0.000000
25%	4942.815000	534.910000
50%	10442.090000	1137.170000
75%	24707.320000	2730.195000
max	583436.720000	110666.930000

Biggest Companies

- Sorting the data by their Market Cap in descending manner will give us the biggest companies in the data.

- This will also give us the smallest companies in the data (bottom of the list after sorting).

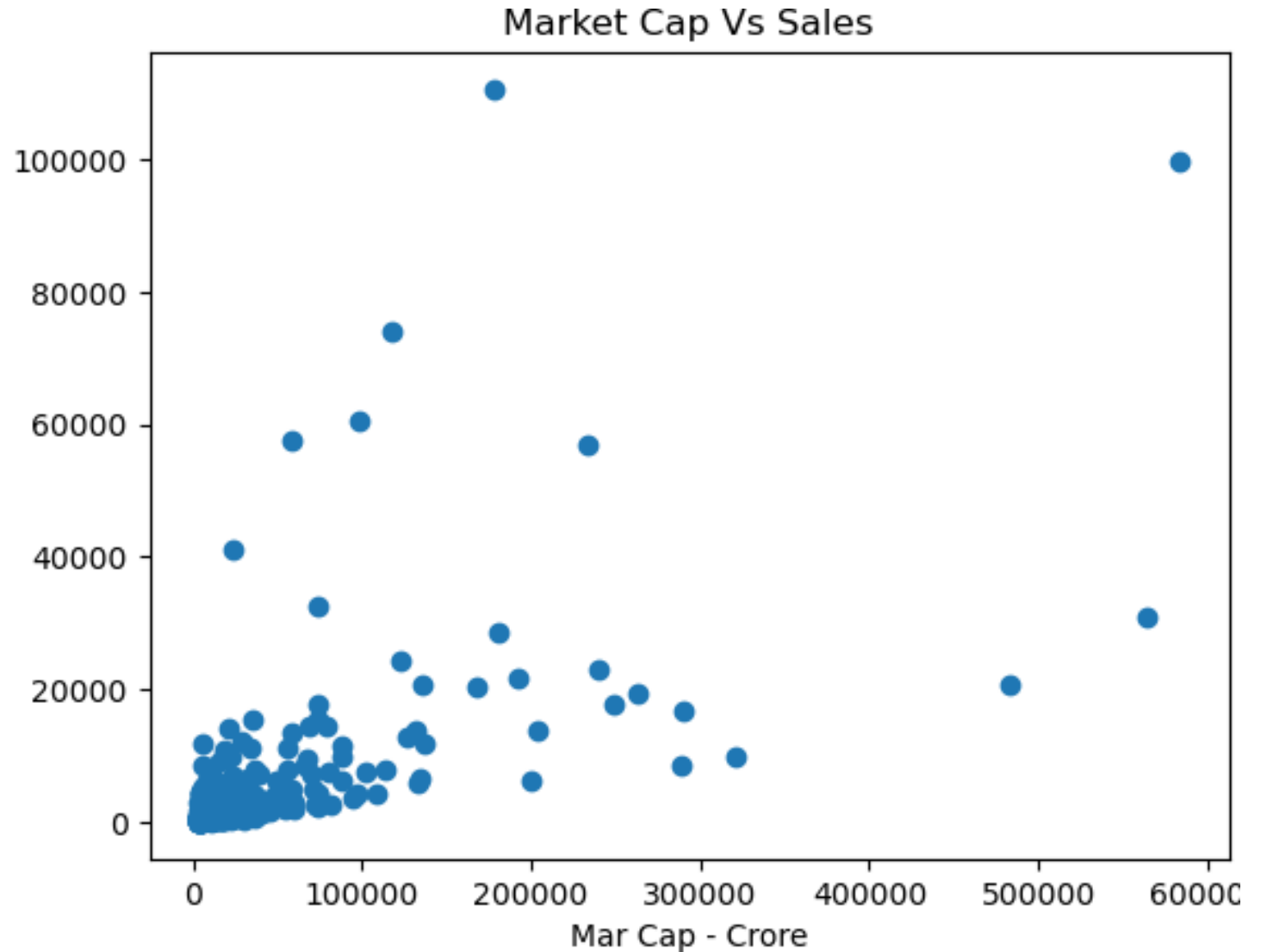|	Name	Mar Cap - Crore	Sales Qtr - Crore
0	Reliance Inds.	583436.72	99810.00
1	TCS	563709.84	30904.00
2	HDFC Bank	482953.59	20581.27
3	ITC	320985.27	9772.02
4	H D F C	289497.37	16840.51
...	...	...	...
482	Prime Focus	3031.50	609.61
483	Lak. Vilas Bank	3029.57	790.17
484	NOCIL	3026.26	249.27
485	Orient Cement	3024.32	511.53
486	Natl.Fertilizer	3017.07	2840.75

Companies with most sales

- Similar to market cap, Sorting the data by their Sales Qtr in descending manner will give us the companies with the most sales in the data.

- This will also give us the companies with the least sales in the data (bottom of the list after sorting).

	Name	Mar Cap - Crore	Sales Qtr - Crore
14	I O C L	178017.48	110666.93
0	Reliance Inds.	583436.72	99810.00
23	Tata Motors	117071.87	74156.07
27	B P C L	98278.00	60616.36
54	H P C L	58034.78	57474.25
...	...	...	...
422	Multi Comm. Exc.	3847.19	60.97
467	Central Dep. Ser	3316.31	47.24
382	Tata Inv.Corpn.	4401.66	47.02
228	SPARC	10755.13	19.42
393	Ujjivan Fin.Ser.	4293.42	0.00

Market Cap vs Sales Qtr

- We can plot a scatterplot between the Market Cap and the Sales Qtr of the companies to see the relation between the two.

- The Plot comes out to be as shown.

- We conclude that most companies come in the Low Market Cap low Sales Qtr Quadrant.

Market Cap Vs Sales

THANK YOU