

The data provided for this assignment is quite large and it is spreaded over 3.5 years (2015, 2016, 2017 and 2018). For the analysis purpose, all the csv files were imported first and then corresponding tables were created, with the necessary columns. Afterwards, 20 and 50 day moving average data were used to generate the 'buy', 'hold' and 'sell' signals. The 'lag' function helped to generate the signals. At the end of the assignment a user defined function has been created to access the signals corresponding to a given date.

Below table describes number of different signals (year-wise) for all the given stocks:

Year	Signals	Baja Auto	Eicher Motors	Hero Motocorp	Infosys	TCS	TVS
2015	Buy	65	55	59	54	53	69
	Hold	120	137	132	138	139	108
	Sell	63	55	56	56	54	70
2016	Buy	63	52	60	65	56	62
	Hold	122	144	128	115	132	124
	Sell	62	51	59	67	59	62
2017	Buy	62	49	63	55	55	54
	Hold	126	153	127	133	136	143
	Sell	59	46	58	59	57	51
2018	Buy	31	33	34	36	23	30
	Hold	86	80	80	73	99	86
	Sell	29	33	32	37	24	30

In summary, SQL can be used efficiently to tackle large amount of data to create necessary tables, make necessary queries and draw meaningful conclusion.