SUMMARY

In First Question I have used STR_TO_DATE function to convert Date format in SQL Date format and by Using Window function to calculate moving average for 20 days and 50 days.

In Second Question I have used JOINS on Date and Close Price from all six Stock and WHERE clause on date to filter the records.

In Third Question I have used LAG function to get values from the previous row and make decision (Buy/Sell/Hold) and Using ROW_NUMBER () to count and ignore first 50 rows as they will have false moving average.

In Fourth Question I have used User Define Function to get Signal (Buy/Sell/Hold) for a particular date from already created stock tables.

INFERENCES

Here I have performed this query for all the Stock to get the (Buy/Sell/Hold) percentage In place of `Stock_table2` put the name of the table for which we want to perform the query E.g.- `bajaj2`, `tcs2`, `tvs2`, `infosys2`, `eicher2`, `hero2`.

SELECT `Signal`, ROUND (100*(COUNT(`Signal`)/ (SELECT COUNT (*) From `Stock_table2`)),2) AS `Signal Percentage` FROM `Stock_table2` GROUP BY(`Signal`);

% - Percentage

Stock	BUY (%)	SELL (%)	HOLD (%)
Bajaj Auto	22.07	22.85	56.08
TCS	19.14	19.82	61.04
TVS Motors	21.40	21.62	56.98
Infosys	21.73	22.41	55.86
Eicher Motors	18.47	18.81	62.73
Hero MotoCorp	21.17	21.51	57.32
Total (%)	123.98	127.02	350.01

- Bajaj Auto have Highest BUY% and SELL% signal
- Infosys have Lowest HOLD% signal
- Eicher Motors have Lowest BUY%, SELL% signal and Highest HOLD% signal