SQL Assignment

Generation of signal:

Buy: (Present 20day MA > present 50 day MA) **AND** (Previous 20day MA < previous 50 day MA). This creates golden crossover.

Sell: (Present 20day MA < present 50 day MA) **AND** (Previous 20day MA > previous 50 day MA). This creates death crossover.

If none of the above condition is satisfied, then **HOLD**.

Summary

Growth Percentage:

Stock	Initial close price (Rs.) - 1st Jan 2015	Close price(Rs.) as of 31st July 2018	Absolute growth Percentage (over 3.5 years) (%)	Compound Annual Growth (over 3 years) (%)
Bajaj	2454.1	2700.7	10.048	3.24%
Eicher	15239.15	27820.95	82.562	22.22%
Hero	3107.3	3293.8	6.002	1.96%
Infosys	1975.8	1365	-30.914	-11.60%
TCS	2548.2	1941.25	-23.819	-8.67%
TVS	276.85	517.45	86.906	23.18%

Trend:

Stock	Initial close price (Rs.) – 1st Jan 2015	Close price(Rs.) as of 31st July 2018	Growth Percentage (over 3.5 years)	Trend
Bajaj	2454.1	2700.7	10.048	Sideway stock
Eicher	15239.15	27820.95	82.562	Up
Hero	3107.3	3293.8	6.002	Sideway stock
Infosys	1975.8	1365	-30.914	Down
TCS	2548.2	1941.25	-23.819	Down
TVS	276.85	517.45	86.906	Up

- Sideway stock: (Bajaj and Hero) There is not much significant difference in close price over the period 3.5 years.
- Up (Eicher and TVS) : Growth percentage of close price over 3.5 years is 80 + %
- Down (Infosys and TCS) : Growth percentage of close price over 3.5 years is negative.

Count of Golden crossover and death crossover (over the period of 3.5 years):

Stock	Golden cross over	Death cross over
Bajaj	12	11
Eicher	6	7
Hero	9	9
Infosys	9	9
TCS	12	13
TVS	8	8

Average close price of stock during signal generation:

Stock	Hold Close price (Rs.)	Buy Close price (Rs.)	Sell Close price (Rs.)
Bajaj	2676.64	2754.25	2755.61
Eicher	23114	22469	23486
Hero	3156.59	3253.91	3192.73
Infosys	1203.8	1052.4	1154.2
TCS	2518.3	2637.7	2430.7
TVS	422.47	342.88	380.09