#The csv files after plugging the blank value using python script were exported

#to the drive as bajaj, hero, eicher, infosys\_full, tcs\_full and tvs.

#Please import these file using mysql import wizard.

#once imported rename infosys and tcs file to maintain uniformity.

rename table infosys\_full to infosys, tcs\_full to tcs;

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#please run the codes sequentially to get desired results as per assignment.

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#checking if there are unique Dates in each row of the imported table;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from bajaj

group by Date

having counts > 1;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from eicher

group by Date

having counts > 1;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from hero

group by Date

having counts > 1;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from infosys

group by Date

having counts > 1;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from tcs

group by Date

having counts > 1;

select str\_to\_date(Date, '%d-%M-%Y') as Date,

count(Date) as counts

from tvs

group by Date

having counts > 1;

#all the files yables have uniq dates in the Date row. can be used as primary key

# for join operations later.

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#creating stock1 tables

#create bajaj1

create table bajaj1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from bajaj order by Date;

alter table bajaj1

add primary key(Date);

#create eicher1

create table eicher1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from eicher order by Date;

alter table eicher1

add primary key(Date);

#create hero1

create table hero1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from hero order by Date;

alter table hero1

add primary key(Date);

#create infosys11

create table infosys1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from infosys order by Date;

alter table infosys1

add primary key(Date);

#create tcs1

create table tcs1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from tcs order by Date;

alter table tcs1

add primary key(Date);

#create tvs1

create table tvs1

select str\_to\_date(Date, '%d-%M-%Y') as "Date", round(`Close Price`, 2) as "Close Price",

round(avg(`Close Price`) over(rows 19 preceding), 2) as "20 Day MA",

round(avg(`Close Price`) over(rows 49 preceding), 2) as "50 Day MA"

from tvs order by Date;

alter table tvs1

add primary key(Date);

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#creating master tables

create table master

select b.Date,

b.`Close Price` as "Bajaj", tc.`Close Price` as "TCS",

tv.`Close Price` as "TVS", i.`Close Price` as "Infosys",

e.`Close Price` as "Eicher", h.`Close Price` as "Hero"

from bajaj1 as b inner join tcs1 as tc

inner join tvs1 as tv

inner join infosys1 as i

inner join eicher1 as e

inner join hero1 as h

where b.Date = tc.Date

and b.Date = tv.Date

and b.Date = i.Date

and b.Date = e.Date

and b.Date = h.Date;

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#creating bajaj2

create table bajaj2

select Date, `Close Price`,

case when flag = 0.5 and trend = "up" then "buy"

when flag = 0.5 and trend = "down" then "sell"

else "hold"

end as "Signal"

from (select \*,

case when(`20 Day MA` > `50 Day MA`) then "up"

when(`20 Day MA` = `50 Day MA`) then "same"

else "down"

end as "trend",

#(`20 Day MA` > `50 Day MA`) as "change",

avg(`20 Day MA` > `50 Day MA`) over (rows 1 preceding ) as "flag",

row\_number() over(order by Date) as rownum

from bajaj1) as temp

where rownum > 49;

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#create proceduree getSignal

delimiter $$

create procedure getSignal

(in dt varchar(10), out Sign varchar(4))

begin

select

if(str\_to\_date(dt, '%d-%m-%Y') in (select `Date` from bajaj2),

(select `Signal` from bajaj2 where `Date` = str\_to\_date(dt, '%d-%m-%Y')),

"Date Doesn't exist")

as Sign;

end

$$

delimiter ;

#call procedure, Input to be made in dd-mm-yyyy format.

call getSignal("20-01-2016", @Sign);