CREATE THE DATABASE

create table marketing\_data (

id int not null primary key,

date datetime,

geo varchar(2),

impressions float,

clicks float

);

create table store\_revenue (

id int not null primary key,

date datetime,

brand\_id int,

store\_location varchar(250),

revenue float

);

INSERT INTO marketing\_data VALUES("1","2016-01-01","TX","2532","45"),

("2","2016-01-01","CA","3425","63"),

("3","2016-01-01","NY","3532","25"),

("4","2016-01-01","MN","1342","784"),

("5","2016-01-02","TX","3643","23"),

("6","2016-01-02","CA","1354","53"),

("7","2016-01-02","NY","4643","85"),

("8","2016-01-02","MN","2366","85"),

("9","2016-01-03","TX","2353","57"),

("10","2016-01-03","CA","5258","36"),

("11","2016-01-03","NY","4735","63"),

("12","2016-01-03","MN","5783","87"),

("13","2016-01-04","TX","5783","47"),

("14","2016-01-04","CA","7854","85"),

("15","2016-01-04","NY","4754","36"),

("16","2016-01-04","MN","9345","24"),

("17","2016-01-05","TX","2535","63"),

("18","2016-01-05","CA","4678","73"),

("19","2016-01-05","NY","2364","33"),

("20","2016-01-05","MN","3452","25");

INSERT INTO store\_revenue VALUES ("1","2016-01-01","1","United States-CA","100"),

("2","2016-01-01","1","United States-TX","420"),

("3","2016-01-01","1","United States-NY","142"),

("4","2016-01-02","1","United States-CA","231"),

("5","2016-01-02","1","United States-TX","2342"),

("6","2016-01-02","1","United States-NY","232"),

("7","2016-01-03","1","United States-CA","100"),

("8","2016-01-03","1","United States-TX","420"),

("9","2016-01-03","1","United States-NY","3245"),

("10","2016-01-04","1","United States-CA","34"),

("11","2016-01-04","1","United States-TX","3"),

("12","2016-01-04","1","United States-NY","54"),

("13","2016-01-05","1","United States-CA","45"),

("14","2016-01-05","1","United States-TX","423"),

("15","2016-01-05","1","United States-NY","234"),

("16","2016-01-01","2","United States-CA","234"),

("17","2016-01-01","2","United States-TX","234"),

("18","2016-01-01","2","United States-NY","142"),

("19","2016-01-02","2","United States-CA","234"),

("20","2016-01-02","2","United States-TX","3423"),

("21","2016-01-02","2","United States-NY","2342"),

("22","2016-01-03","2","United States-CA","234234"),

("23","2016-01-06","3","United States-TX","3"),

("24","2016-01-03","2","United States-TX","3"),

("25","2016-01-03","2","United States-NY","234"),

("26","2016-01-04","2","United States-CA","2"),

("27","2016-01-04","2","United States-TX","2354"),

("28","2016-01-04","2","United States-NY","45235"),

("29","2016-01-05","2","United States-CA","23"),

("30","2016-01-05","2","United States-TX","4"),

("31","2016-01-05","2","United States-NY","124");

* Question #1 Generate a query to get the sum of the clicks of the marketing data​

Select sum(clicks) from marketing\_data

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* Question #2 Generate a query to gather the sum of revenue by geo from the store\_revenue table​

SELECT store\_location , sum(revenue) FROM store\_revenue

GROUP BY store\_location

United States-CA|235237.0

United States-NY|51984.0

United States-TX|9629.0

* Question #3 Merge these two datasets so we can see impressions, clicks, and revenue together by date and geo. Please ensure all records from each table are accounted for.​

SELECT m.geo, m.date, SUM(m.impressions) as impressions, SUM(m.clicks), SUM(r.revenue) FROM marketing\_data m

FULL JOIN store\_revenue r

ON m.date = r.date AND m.geo = SUBSTR(store\_location, (length(store\_location)+1), -2)

GROUP BY geo, m.date

Question #4 In your opinion, what is the most efficient store and why?​

SELECT m.geo, SUM(m.impressions) as impressions, SUM(m.clicks), SUM(r.revenue),

Round(SUM(r.revenue)/SUM(m.impressions),2),Round(SUM(r.revenue)/SUM(m.clicks),2), round(SUM(m.clicks)/SUM(m.impressions),2) FROM marketing\_data m

LEFT JOIN store\_revenue r

ON m.date = r.date AND m.geo = SUBSTR(store\_location, (length(store\_location)+1), -2)

GROUP BY geo

Columns by order: geo, total\_impressions, total\_clicks, total\_revenue, rpi,

Revenue\_per\_clicks, clickthrough\_rate

Most efficient store is California since it has highest revenue, highest RPI value. Although MN store’s click through rate is the best we don’t have information about revenue.

CA|45138.0|620.0|235237.0|5.212|379.415|0.014

MN|22288.0|1005.0||||0.045

NY|40056.0|484.0|51984.0|1.298|107.405|0.012

TX|33692.0|470.0|9626.0|0.286|20.481|0.014

* Question #5 (Challenge) Generate a query to rank in order the top 10 revenue producing states​

SELECT store\_location, date, SUM(revenue), dense\_rank() over (order by sum(revenue) desc) FROM store\_revenue

GROUP BY store\_location,date

LIMIT 10