## **Creating Binary Columns with CASE**

## Business Problem: Flagging upsell opportunities for the sales team

The product team is launching a new product offering that can be added on top of a current subscription for an increase in the customer's annual fee. The sales team has decided that they first want to reach out to a select group of customers to offer the new product and get feedback before offering it to the entire customer base.

They've decided it would be best to reach out to customers who meet **one** of the following two conditions:

- 1. Have at least 5,000 registered users
  - Companies with large amounts of users are a significant upsell opportunity, because they can lead to more potential revenue. (More users = More \$)

OR

- 2. Only have one product subscription
  - Based on conversations the sales team has had with customers, the companies that already have subscriptions for two products are not going to be willing to spend more and add onto their current subscriptions.

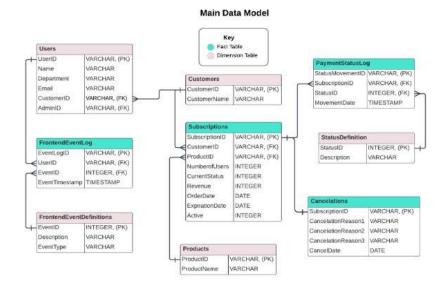
You decide to help out the sales team by providing them a report with all current customers and the number of product subscriptions and registered users they currently have. To make it extra easy for the sales team to identify customers that are <a href="upsell\_opportunity">upsell\_opportunity</a>, you also include a binary column that flags the customers that meet one of these conditions.

## Task:

Create a report using the subscriptions table that contains:

- customerid
- The total number of products for that customer, num\_products
- The total number of users for that customer, total\_users
- Binary column that flags 1 for those who meet one of the upsell\_opportunity conditions using CASE

In real life, you'd likely have to export this report to Excel to deliver to the sales team. But you can skip that step for the sake of this problem!



```
-- SQL code by John Uzoma
     select
         customerid,
         count(productid) as num_products,
 4
         sum(numberofusers) as total_users,
 5
 6
         case
 7
             when sum(numberofusers) >= 5000 or count(subscriptionid) = 1 then 1
 8
         else 0
         end as upsell_opportunity
 9
     from subscriptions
10
     group by customerid
11
```

## Result

ĺ	CUSTOMERID	1	NUM_PRODUCTS	I	TOTAL_USERS	]	UPSELL_OPPORTUNITY
1	11627	1	2	1	1300	1	0
Î	18226	1	2	Ī	2000	1	0
Í	23561	1	2	1	1700	1	0
j	28333	1	2	I	1050		0
j	29335	1	1	1	50	]	1
Ì	33222	1	2	f	325	1	0
j	33663	1	2	Ţ	1750	j	0
j	33667	1	2	1	1600	1	0
1	38822	1	2	1	1000		0
1	44538	1	2	I	3000	1	0
j	55533	1	2	1	17000	1	1
j	76338	1	2	I	1700		0
j	82772	1	2	1	5300		1
1	93888	1	1	Í	5000		1
Ì	99402	1	2	Ï	2000	1	0