

```

1 WITH churn as (
2   select distinct(CUST_CODE), year_month,
3   case when date_diff('2008-06-01',recent_date,day) > 30 then -1 else 0
4   end as churn_customer
5   from (
6     SELECT CUST_CODE,format_datetime("%Y%m",parse_date("%Y%m%d",CAST( SHOP_DATE AS STRING ))) as year_month,
7     max(PARSE_DATE('%Y%m%d', CAST( SHOP_DATE AS STRING ))) over (partition by CUST_CODE) as recent_date
8     FROM `nodal-pod-331409.sample_dataset.Supermarket`
9     where CUST_CODE is not null
10    )
11 ),
12 new_cus as (
13   select distinct(CUST_CODE), year_month,
14   case when frequency = 1 then 1 else 0
15   end as new_customer
16   from (
17     select CUST_CODE,
18     format_datetime("%Y%m",parse_date("%Y%m%d",CAST( SHOP_DATE AS STRING ))) as year_month,
19     row_number() over (partition by CUST_CODE) as frequency
20     FROM `nodal-pod-331409.sample_dataset.Supermarket`
21     where CUST_CODE is not null
22    )
23 ),
24 remaining as (
25   select CUST_CODE, year_month,
26   case when recency = 1 then 1 else 0 end as repeat_customer,
27   case when recency > 1 then 1 else 0 end as reactivated_customer
28   from (
29     select CUST_CODE, year_month,
30     date_diff(parse_date("%Y%m", year_month), previous_month, month) as recency
31     from (
32       select CUST_CODE, year_month,
33       parse_date("%Y%m",lag(year_month) over (partition by CUST_CODE order by year_month asc)) as previous_month
34       from (
35         select CUST_CODE,
36         format_datetime("%Y%m",parse_date("%Y%m%d",CAST( SHOP_DATE AS STRING ))) as year_month,
37         FROM `nodal-pod-331409.sample_dataset.Supermarket`
38         where CUST_CODE is not null
39       )
40     )
41 )
44 select r.*, n.new_customer, c.churn_customer
45 from remaining r
46 right join new_cus n
47 on r.CUST_CODE = n.CUST_CODE and r.year_month = n.year_month
48 right join churn c
49 on r.CUST_CODE = c.CUST_CODE and r.year_month = c.year_month

```

Query results

[SAVE RESULTS](#)
[EXPLORE DATA](#)

Query complete (0.1 sec elapsed, cached)

Job information [Results](#) [JSON](#)

Row	CUST_CODE	year_month	repeat_customer	reactivated_customer	new_customer	churn_customer
1	CUST0000069724	200805	0	1	0	0
2	CUST0000069724	200805	0	0	0	0
3	CUST0000069724	200805	0	0	0	0