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1 SELECT *,
2 CASE
3 WHEN mindate > master_date THEN null
4 WHEN firstdate = 1 THEN "new cust"
5 WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 1 THEN "repeat"
6 WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 0 THEN "reactivated"
7 ELSE "churn"
8 END AS cust_status ,
9 CASE
10 WHEN mindate > master_date THEN null
11 WHEN firstdate = 1 THEN 1
12 WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 1 THEN 1
13 WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 0 THEN 1
14 ELSE -1
15 END AS cust_status_value
16 FROM
17 (SELECT *,
18  LAG(cust_txn) OVER (PARTITION BY CUST_CODE ORDER BY master_date) previousmonth
19 FROM
20 ((SELECT tb_master.master_date, tb_master.CUST_CODE ,
21  tb_min_max.mindate , tb_min_max.maxdate ,
22  IF(tb_txn.CUST_CODE IS NULL , 0 , 1) cust_txn,
23  IF(tb_min_max.mindate = tb_master.master_date , 1 , 0) firstdate,
24  IF(tb_min_max.mindate <= tb_master.master_date , 1 , 0) valid,
25  IF(tb_min_max.maxdate < tb_master.master_date , 1 , 0) churn,
26 FROM
27 (SELECT tb_date.master_date , tb_cust.CUST_CODE
28 FROM
29 (SELECT DISTINCT DATE_TRUNC(date, MONTH) AS master_date
30 FROM
31 (SELECT PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date
32 FROM `helpful-reactor-331409.Supermarket.S1`) tb_date
33 CROSS JOIN
34
35 (SELECT DISTINCT CUST_CODE FROM `helpful-reactor-331409.Supermarket.S1`
36 WHERE CUST_CODE IS NOT NULL) tb_cust) tb_master
37 LEFT JOIN
38 (SELECT CUST_CODE , DATE_TRUNC(mindate, MONTH) mindate , DATE_TRUNC(maxdate, MONTH) maxdate
39 FROM
40 (SELECT CUST_CODE , MIN(date) AS mindate , MAX(date) AS maxdate
41 FROM
42 (SELECT CUST_CODE , PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date
43 FROM `helpful-reactor-331409.Supermarket.S1`
44 WHERE CUST_CODE IS NOT NULL)
45 GROUP BY CUST_CODE)) tb_min_max
46 ON tb_master.CUST_CODE = tb_min_max.CUST_CODE
47 |
48 LEFT JOIN
49
50 (SELECT DISTINCT CUST_CODE , DATE_TRUNC(date, MONTH) AS txn_date
51 FROM
52 (SELECT CUST_CODE, PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date
53 FROM `helpful-reactor-331409.Supermarket.S1`)
54 ) tb_txn
55 ON tb_master.master_date = tb_txn.txn_date AND tb_master.CUST_CODE = tb_txn.CUST_CODE))
56 ORDER BY CUST_CODE , master_date
57
58
59
60

```

