```sql
SELECT  *,
    CASE
      WHEN mindate > master_date THEN null
      WHEN firstdate = 1 THEN "new cust"
      WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 1 THEN "repeat"
      WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 0 THEN "reactivated"
      ELSE "churn"
      END AS cust_status ,
    CASE
      WHEN mindate > master_date THEN null
      WHEN firstdate = 1 THEN 1
      WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 1 THEN 1
      WHEN valid = 1 AND cust_txn = 1 AND previousmonth = 0 THEN 1
      ELSE -1
      END AS cust_status_value
FROM
(SELECT  *,
    LAG(cust_txn) OVER (PARTITION BY CUST_CODE ORDER BY master_date) previousmonth
FROM
  (SELECT  tb_master.master_date, tb_master.CUST_CODE ,
      tb_min_max.mindate , tb_min_max.maxdate ,
      IF(tb_txn.CUST_CODE IS NULL , 0 , 1) cust_txn,
      IF(tb_min_max.mindate = tb_master.master_date , 1 , 0) firstdate,
      IF(tb_min_max.mindate <= tb_master.master_date , 1 , 0) valid,
      IF(tb_min_max.maxdate < tb_master.master_date , 1 , 0) churn,
   FROM
     (SELECT tb_date.master_date , tb_cust.CUST_CODE
     FROM
     (SELECT DISTINCT DATE_TRUNC(date, MONTH)  AS master_date
     FROM
       (SELECT PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date
```

```sql
    FROM `nida-crm-331409.churn.supermarket`)) tb_date


    CROSS JOIN


    (SELECT DISTINCT CUST_CODE FROM `nida-crm-331409.churn.supermarket`

    WHERE CUST_CODE IS NOT NULL) tb_cust) tb_master


    ------------------------min max date------------------------
    LEFT JOIN

    (SELECT CUST_CODE , DATE_TRUNC(mindate, MONTH) mindate , DATE_TRUNC(maxdate, MONTH)
maxdate

    FROM

        (SELECT CUST_CODE , MIN(date) AS mindate , MAX(date) AS maxdate

        FROM

            (SELECT CUST_CODE , PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date

            FROM `nida-crm-331409.churn.supermarket`

            WHERE CUST_CODE IS NOT NULL)

        GROUP BY CUST_CODE)) tb_min_max
    ON tb_master.CUST_CODE = tb_min_max.CUST_CODE


    --------------------------txn--------------------------
    LEFT JOIN


    (SELECT DISTINCT CUST_CODE , DATE_TRUNC(date, MONTH)  AS txn_date
    FROM

        (SELECT CUST_CODE, PARSE_DATE("%Y%m%d" , CAST(SHOP_DATE AS STRING)) date

        FROM `nida-crm-331409.churn.supermarket`)

      ) tb_txn
    ON tb_master.master_date = tb_txn.txn_date AND tb_master.CUST_CODE = tb_txn.CUST_CODE))


ORDER BY CUST_CODE , master_date
```

Row	master_date	CUST_CODE	mindate	maxdate	cust_txn	firstdate	valid	churn	previousmonth	cust_status	cust_status_value
324	2007-07-01	CUST0000002813	2007-07-01	2008-04-01	1	1	1	0	0	new cust	1
325	2007-08-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
326	2007-09-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
327	2007-10-01	CUST0000002813	2007-07-01	2008-04-01	0	0	1	0	1	churn	-1
328	2007-11-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	0	reactivated	1
329	2007-12-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
330	2008-01-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
331	2008-02-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
332	2008-03-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
333	2008-04-01	CUST0000002813	2007-07-01	2008-04-01	1	0	1	0	1	repeat	1
334	2008-05-01	CUST0000002813	2007-07-01	2008-04-01	0	0	1	1	1	churn	-1
335	2008-06-01	CUST0000002813	2007-07-01	2008-04-01	0	0	1	1	0	churn	-1
336	2008-07-01	CUST0000002813	2007-07-01	2008-04-01	0	0	1	1	0	churn	-1