```sql
WITH data_ AS (SELECT CUST_CODE,
DATE_TRUNC(SHOP_DATE2,month) AS MONTH_
FROM
(SELECT
PARSE_DATE('%Y%m%d', CAST(SHOP_DATE AS STRING)) AS SHOP_DATE2,
CUST_CODE
 FROM `aonz_data.SuperMarket.data`
 WHERE CUST_CODE IS NOT NULL)
 GROUP BY 1,2)

,data_2 AS (SELECT
MONTH_M,
MONTH_,
REGISTER_DATE,
CUST_CODE
FROM
(SELECT
DISTINCT MONTH_ AS MONTH_M
FROM
data_) A
 LEFT JOIN
(SELECT
*
FROM
data_ A1
 RIGHT JOIN
--  REGISTER
(SELECT
CUST_CODE AS CUST_CODE_RE ,MIN(MONTH_) as REGISTER_DATE
FROM
-- MAIN
data_
 GROUP BY 1) A2
 ON A1.CUST_CODE = A2.CUST_CODE_RE) B
 ON A.MONTH_M = B.MONTH_)


--  SUMMARY DATA
SELECT
    MONTH_M,
    F_CUST,
    CASE WHEN F_CUST = 'CHURN' THEN (-1)*cust ELSE cust END AS CUST
FROM
(
    SELECT
    MONTH_M,
    F_CUST,
    count(distinct CUST_CODE) as cust
FROM
(
SELECT * FROM
  -- NEW,REPEAT,REACTIVATE
  (SELECT
    MONTH_M,
```

```sql
    CUST_CODE,
    REGISTER_DATE,
    DATE_DIFF(MONTH_, PRE_M, MONTH) AS R,
    CASE
        WHEN MONTH_ = REGISTER_DATE THEN 'NEW'
        WHEN DATE_DIFF(MONTH_,PRE_M, MONTH) =1 THEN 'REPEAT'
        WHEN DATE_DIFF(MONTH_,PRE_M, MONTH) >1 THEN 'REACTIVATE'
     END AS F_CUST
FROM
(SELECT
    CUST_CODE,
    MONTH_M,
    MONTH_,
    REGISTER_DATE,
 LAG(MONTH_) OVER (PARTITION BY CUST_CODE ORDER BY MONTH_) AS PRE_M
FROM
data_2))
UNION ALL
-- CHURN
(SELECT
    MONTH_M,
    CUST_CODE,
    REGISTER_DATE,
    R,
    F_CUST
FROM
(SELECT
    CUST_CODE,
    F_CUST,
    REGISTER_DATE,
    NULL as R,
    MIN(CASE WHEN F_CUST = 'CHURN' THEN MONTH_M END) AS MONTH_M
FROM
(SELECT *,
CASE WHEN MONTH_M > LAST_DATE THEN 'CHURN' END AS F_CUST
FROM
(SELECT
1 AS KEY, MONTH_ AS MONTH_M
FROM
data_
GROUP BY 1,2) A
 LEFT JOIN
(SELECT
1 AS KEY,*
FROM
data_ A1
 RIGHT JOIN
(SELECT
CUST_CODE AS CUST_CODE_RE ,MIN(MONTH_) as REGISTER_DATE,MAX(MONTH_) as LAST_DATE
FROM
data_
 GROUP BY 1) A2
 ON A1.CUST_CODE = A2.CUST_CODE_RE) B
 ON A.KEY = B.KEY)
```

```
GROUP BY 1,2,3)
WHERE F_CUST IS NOT NULL)
)
GROUP BY 1,2 )
order by 1 asc
```

MONTH_M	CUST_CODE	REGISTER_DATE	R	F_CUST
2006-05-01	CUST0000007501	2006-05-01	*null*	NEW
2006-06-01	CUST0000007501	2006-05-01	1	REPEAT
2006-07-01	CUST0000007501	2006-05-01	1	REPEAT
2006-08-01	CUST0000007501	2006-05-01	1	REPEAT

Result

Row	MONTH_M	F_CUST	CUST
1	2006-04-01	NEW	1003
2	2006-05-01	REPEAT	675
3	2006-05-01	NEW	544
4	2006-05-01	CHURN	-76
5	2006-06-01	REPEAT	787
6	2006-06-01	CHURN	-102
7	2006-06-01	NEW	382
8	2006-06-01	REACTIVATE	82
9	2006-07-01	REPEAT	843
10	2006-07-01	NEW	385
11	2006-07-01	CHURN	-84
12	2006-07-01	REACTIVATE	181
13	2006-08-01	NEW	366
14	2006-08-01	CHURN	-142

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Legend: REPEAT, REACTIVATE, NEW, CHURN

Y-axis: 2K, 1K, 0, -1K, -2K

X-axis: May 2006, Jun 2006, Jul 2006, Aug 2006, Sept 2006, Oct 2006, Nov 2006, Dec 2006, Jan 2007, Feb 2007, Mar 2007, Apr 2007, May 2007, Jun 2007, Jul 2007, Aug 2007, Sept 2007, Oct 2007, Nov 2007, Dec 2007, Jan 2008, Feb 2008, Mar 2008, Apr 2008, May 2008, Jun 2008, Jul 2008