

```
testPSQS01 : ) create database if not exists demo ;
```

```
CREATE DATABASE IF NOT EXISTS demo
```

```
Query id: afb67399-7bfe-4261-a01b-15c2e16891a5
```

```
ok.
```

```
0 rows in set. Elapsed: 0.040 sec.
```

```
testPSQS01 : ) SHOW DATABASES;
```

```
SHOW DATABASES
```

```
Query id: 2ef1cb74-a57c-4715-98b1-7a405e0a1e1f
```

```
+-----+  
| name |
```

```
1. | INFORMATION_SCHEMA  
2. | default  
3. | demo  
4. | information_schema  
5. | system
```

```
testPSQS01 :) create table if not exists demo.sales
(
    sale_id          String,
    sale_date_str   LowCardinality(String),      -- DD-MM-YYYY
    store_id         LowCardinality(String),
    product_id       LowCardinality(String),
    quantity         UInt16,
    sale_date        Date MATERIALIZED toDate(parseDateTimeBestEffort(sale_date_str)),
    sale_yyyymm      UInt32 MATERIALIZED toYYYYMM(sale_date),
    sale_dow         UInt8 MATERIALIZED toUInt8(toDayOfWeek(sale_date)) -- 1=Mon ... 7=Sun
)
engine = MergeTree
partition by sale_yyyymm
order by (sale_date, store_id, product_id) ;

CREATE TABLE IF NOT EXISTS demo.sales
(
    `sale_id` String,
    `sale_date_str` LowCardinality(String),
    `store_id` LowCardinality(String),
    `product_id` LowCardinality(String),
    `quantity` UInt16,
    `sale_date` Date MATERIALIZED toDate(parseDateTimeBestEffort(sale_date_str)),
    `sale_yyyymm` UInt32 MATERIALIZED toYYYYMM(sale_date),
    `sale_dow` UInt8 MATERIALIZED toUInt8(toDayOfWeek(sale_date))
)
ENGINE = MergeTree
PARTITION BY sale_yyyymm
ORDER BY (sale_date, store_id, product_id)

Query id: e6c87231-4827-4807-885b-d22f18df5ed0
ok.

0 rows in set. Elapsed: 0.048 sec.
```

```

TE AS. (SYNTAX_ERROR)

root@testPSQSO1:/home/administrator# clickhouse-client --host localhost --port 9000 --database demo --query "
INSERT INTO sales (sale_id, sale_date_str, store_id, product_id, quantity)
SETTINGS
    input_format_csv_skip_first_lines = 1,
    date_time_input_format = 'best_effort'
FORMAT CSV" < /home/administrator/sales.csv
root@testPSQSO1:/home/administrator# clickhouse-client --host localhost --port 9000 --database demo
ClickHouse client version 25.12.4.35 (official build).
Connecting to database demo at localhost:9000 as user default.
Connected to ClickHouse server version 25.12.4.

Warnings:
* Delay accounting is not enabled, OSIOWaitMicroseconds will not be gathered. You can enable it using `sudo sh -c 'ctl.
* Maximum number of threads is lower than 30000. There could be problems with handling a lot of simultaneous queries.

testPSQSO1 :) select * from demo.sales limit 5;

SELECT *
FROM demo.sales
LIMIT 5

Query id: 679bdc46-3d0f-441a-b69d-3245f428a923

  sale_id  sale_date_str  store_id  product_id  quantity
1. JX-245993  01-01-2020  ST-1      P-10       4
2. AQ-57663   01-01-2020  ST-1      P-26       4
3. NV-9592    01-01-2020  ST-1      P-35       7
4. BX-44914   01-01-2020  ST-1      P-43       6
5. JZ-23430   01-01-2020  ST-10     P-11       3

5 rows in set. Elapsed: 0.013 sec. Processed 18.00 thousand rows, 292.80 KB (1.41 million rows/s., 22.94 MB/s.)

```

```
Y sales_dow. Maybe you meant: ['sale_dow']. (UNKNOWN_IDENTIFIER)
testPSQS01 :) select sale_dow, count(product_id) from sales group by sale_dow;
SELECT
    sale_dow,
    count(product_id)
FROM sales
GROUP BY sale_dow
Query id: 443a6cd9-d485-4579-aa4d-84d7afb51ee1
+-----+-----+
| sale_dow | count(product_id) |
+-----+-----+
1.      1 |          148341 |
2.      2 |          149201 |
3.      3 |          148649 |
4.      4 |          148313 |
5.      5 |          148487 |
6.      6 |          148036 |
7.      7 |          149173 |
+-----+-----+
7 rows in set. Elapsed: 0.035 sec. Processed 1.04 million rows, 2.14 MB (29.68 million rows/s., 61.16 MB/s.)
Peak memory usage: 629.70 KiB.
testPSQS01 :) █
```

```
testPSQ501 :) select quantity, count() from sales where product_id = 'P-39' and quantity < 3 group by quantity;
SELECT
    quantity,
    count()
FROM sales
WHERE (product_id = 'P-39') AND (quantity < 3)
GROUP BY quantity
Query id: f836e009-2278-45b3-8e1f-01367d68d97b
1. ┌─────────┬─────────┐
   └─────────┴─────────┘
2. ┌─────────┬─────────┐
   └─────────┴─────────┘
```

2 rows in set. Elapsed: 0.032 sec. Processed 1.04 million rows, 3.18 MB (33.00 million rows/s., 101.01 MB/s.)
Peak memory usage: 1.94 MiB.

```
testPSQ501 :) ALTER TABLE demo.sales
UPDATE quantity = 3
WHERE product_id = 'P-39' and quantity < 3;

ALTER TABLE demo.sales
(UPDATE quantity = 3 WHERE (product_id = 'P-39') AND (quantity < 3))

Query id: 16120700-69aa-46d9-8fbf-1b7372bc2751
ok.

0 rows in set. Elapsed: 0.030 sec.

testPSQ501 :) select quantity, count() from sales where product_id = 'P-39' and quantity < 3 group by quantity;
SELECT
    quantity,
    count()
FROM sales
WHERE (product_id = 'P-39') AND (quantity < 3)
GROUP BY quantity
Query id: d22d797c-8c29-4755-b928-5c8e8977694f
ok.

0 rows in set. Elapsed: 0.028 sec. Processed 1.04 million rows, 3.18 MB (37.44 million rows/s., 114.59 MB/s.)
```

```

testPSQSO1 :) alter table demo.sales add column is_discont Bool;
ALTER TABLE demo.sales
  (ADD COLUMN `is_discont` Bool)

Query id: 5735374f-bb8e-4207-a3dd-30062da8ba27
Ok.

0 rows in set. Elapsed: 0.014 sec.

testPSQSO1 :) select * from sales limti 5;
Syntax error: failed at position 27 (5):
select * from sales limti 5;

Expected one of: FINAL, SAMPLE, table, table function, subquery or list of joined tables, array
  ANTI, ONLY, LEFT, RIGHT, FULL, CROSS, PASTE, JOIN, token, OpeningRoundBracket, PREWHERE, WHERE
  INGS, UNION, EXCEPT, INTERSECT, INTO OUTFILE, FORMAT, ParallelWithClause, PARALLEL WITH, end of
  statement

testPSQSO1 :) select * from sales limit 5;
SELECT *
FROM sales
LIMIT 5

Query id: f0966050-4f17-4b6b-8798-3c05cb74b07f
+-----+-----+-----+-----+-----+-----+
| sale_id | sale_date_str | store_id | product_id | quantity | is_discont |
+-----+-----+-----+-----+-----+-----+
1. JX-245993 | 01-01-2020 | ST-1 | P-10 | 4 | false
2. AQ-57663 | 01-01-2020 | ST-1 | P-26 | 4 | false
3. NV-9592 | 01-01-2020 | ST-1 | P-35 | 7 | false
4. BX-44914 | 01-01-2020 | ST-1 | P-43 | 6 | false
5. JZ-23430 | 01-01-2020 | ST-10 | P-11 | 3 | false
+-----+-----+-----+-----+-----+-----+

```

5 rows in set. Elapsed: 0.006 sec. Processed 17.73 thousand rows 288.52 KB / 3.15 million rows

```
testPSQS01 :) alter table demo.sales
delete where store_id = 'ST-39';

ALTER TABLE demo.sales
  (DELETE WHERE store_id = 'ST-39')

Query id: 57e3ad39-a33f-48ff-8f2f-4781a5a921f0
ok.

0 rows in set. Elapsed: 0.009 sec.

testPSQS01 :)
```

```
testPSQS01 : ) ALTER TABLE demo.sales DROP PARTITION '202006';

ALTER TABLE demo.sales
(DROP PARTITION '202006')

Query id: 4268b911-3a4f-4463-8272-a6cb3622bdc4

Connecting to database demo at localhost:9000 as user default.
Connected to ClickHouse server version 25.12.4.

ok.

0 rows in set. Elapsed: 0.010 sec.

testPSQS01 : ) SELECT
```

```
0 rows in set. Elapsed: 0.001 sec.

testPSQS01 : ) ALTER TABLE demo.sales DETACH PARTITION '202112';

ALTER TABLE demo.sales
  (DETACH PARTITION '202112')

Query id: ac92e84e-2399-4b95-bb6d-dbf2ee380145
Ok.

0 rows in set. Elapsed: 0.005 sec.

testPSQS01 : ) SELECT
    partition
```

```
testPSQS01 :) ALTER TABLE demo.sales ATTACH PARTITION '202112';
ALTER TABLE demo.sales
  (ATTACH PARTITION '202112')

Query id: f140ed60-61f5-458d-8408-8a3e66a45839
ok.

0 rows in set. Elapsed: 0.017 sec.

testPSQS01 :) SELECT
  partition
```