```
Last login: Sat Mar 23 10:12:09 on ttys000 macbook@Kshitijs-MacBook-Air ~ % mysql -u root Welcome to the MySQL monitor. Commands end with ; or \g. Your MySQL connection id is 8 Server version: 8.3.0 Homebrew
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Oracle is a registered trademark of Oracle Corporation and/or its
 affiliates. Other names may be trademarks of their respective
Type 'help:' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use impact;
mysql, use impact,
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A
Database changed
mysql> show tables;
 | Tables in impact
   course
   course 5
   customer_1
   dept
   dept u1
   dept_u2
emp
   emp14
   emp15
emp16
   emp_base
   emp_base_backup
emp_base_delete_backup
emp_select
   emp_v2
emp_withdata
emp_withoutdata
   marks
   product 1
   product_2
product_2_backup
    salurade
   stud_info
   student
   student 5
    student_course
   studentdetails
   test v12
29 rows in set (0.00 sec)
mysql> with ct1 as(
      -> select *from emp where empno=7566
-> )
      -> select *from ct1;
 | empno | ename | job
                                       | mgr | hiredate | sal
                                                                                      | comm | deptno
     7566 | JONES | MANAGER | 7839 | 1981-04-02 | 2975.00 | NULL
                                                                                                          20
1 row in set (0.00 sec)
mysal> select * from ct1:
mysql> CREATE TABLE sales (
                product_name VARCHAR(50),
sales_date DATE,
revenue DECIMAL(10, 2));
       ->
      ->
Query OK, 0 rows affected (0.03 sec)
mysql> INSERT INTO sales (product_name, sales_date, revenue) VALUES
mysd> INSERT INTO sales (product_name, sales_

-> ('Product A', '2023-03-01', 1000),

-> ('Product A', '2023-03-15', 1500),

-> ('Product B', '2023-03-01', 800),

-> ('Product B', '2023-03-01', 800),

-> ('Product B', '2023-03-01', 1200),

-> ('Product C', '2023-03-01', 500),

Query OK, 9 rows affected (0.00 sec)

Records: 9 Duplicates: 0 Warnings: 0
mysql> select * from sales;
 | product_name | sales_date | revenue |
   Product A
                          2023-03-01 | 1000.00
   Product A
                          2023-03-15
                                              1500.00
   Product A
Product B
                         2023-03-13
2023-03-30
2023-03-01
                                               800.00
   Product B
                          2023-03-15
                                              1200.00
   Product B
Product C
Product C
                         2023-03-30
2023-03-01
                                               500.00
                         2023-03-15
                                               750.00
                         2023-03-30
9 rows in set (0.00 sec)
mysql> WITH sales_last_30_days AS (
                 SELECT product_name, SUM(revenue) AS total_revenue
      ->
                 FROM sales
WHERE sales_date BETWEEN '2023-03-10' AND '2023-04-09'
GROUP BY product_name
       ->
      -> ).
-> ),
-> sales_previous_30_days AS (
-> SELECT product_name, SUM(revenue) AS total_revenue
                 FROM sales
WHERE sales_date BETWEEN '2023-02-08' AND '2023-03-09'
GROUP BY product_name
      -> )
      -> SELECT
                 s.product_name,
```

```
(s.total_revenue - p.total_revenue) / p.total_revenue * 100 AS revenue_change
      -> FROM sales last 30 days s
      -> JOIN sales_previous_30_days p ON s.product_name = p.product_name;
 | product name | total revenue | revenue change
                                 3500.00
   Product B
                                2800.00
                                                    250.000000
   Product C
                                1750.00
                                                    250.000000
3 rows in set (0.01 sec)
mysql> CREATE TABLE sales1 (
           order_date DATE
            product VARCHAR(50).
      ->
             quantity INT,
            revenue DECIMAL(10,2)
      -> ):
Query OK, 0 rows affected (0.01 sec)
mysql> INSERT INTO sales1 (order_date, product, quantity, revenue) VALUES
-> ('2023-01-01', 'Product A', 10, 1000.00),
-> ('2023-01-15', 'Product B', 5, 500.00),
-> ('2023-02-01', 'Product A', 8, 800.00),
-> ('2023-02-15', 'Product C', 3, 300.00),
-> ('2023-03-01', 'Product A', 12, 1200.00),
-> ('2023-03-15', 'Product B', 7, 700.00);
Query OK, 6 rows affected (0.01 sec)
Records: 6 Duplicates: 0 Warnings: 0
mvsal>
mysql> WITH monthly_sales AS (
           SELECT
     ->
            DATE_FORMAT(order_date, '%Y-%m') AS month,
product, SUM(revenue) AS revenue
FROM sales1 GROUP BY month,product
      ->
      -> ),
     -> total_sales AS (
-> SELECT
               month, SUM(revenue) AS total revenue
      ->
      ->
            FROM monthly_sales GROUP BY month
      -> SELECT
      ->
             monthly sales month.
             monthly_sales.product,
            monthly sales.revenue,
             (monthly_sales.revenue / total_sales.total_revenue)*100 AS percentage
      ->
      -> FROM
          monthly_sales
JOIN total_sales ON monthly_sales.month = total_sales.month
      ->
      -> ORDER BY monthly_sales.month,percentage DESC;
I month
              | product
                               | revenue | percentage
   2023-01 |
                Product A
Product B
                               | 1000.00 |
   2023-01 I
                                   500.00
                                                 33.333333
   2023-02
                Product A
                                   800.00
                                                 72.727273
  2023-02 | Product C | 300.00 | 27.272727
2023-03 | Product A | 1200.00 | 63.157895
2023-03 | Product B | 700.00 | 36.842105
6 rows in set (0.01 sec)
mysql> with d as(select * from dept),
      -> e as(select * from emp)
      -> select d.deptno,d.dname,e.empno,e.ename,e.sal from e joind on (e.deptno=d.deptno):
-> select d.deptno,d.dname,e.empno,e.ename,e.sal from e joind on (e.deptno=d.deptno);
ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'on (e.deptno=d.deptno)' at line 3
mysql> with d as(select * from dept), e as(select * from emp) select d.deptno,d.dname,e.empno,e.ename,e.sal from e join d on (e.deptno=d.deptno);
ERROR 1864 (42522): Unknown column 'd.deptno' in 'field list'
mysql> select * from dept;
l dno
         l dname
                            1 100
            ACCOUNTING | NEW YORK |
     10
      20
            RESEARCH
                              DALLAS
            SALES |
OPERATIONS |
      30
                               CHICAGO
      40
                               BOSTON
      50 | testing
                               SA
5 rows in set (0.00 sec)
mysql> with d as(select * from dept), e as(select * from emp) select d.dno,d.dname,e.empno,e.ename,e.sal from e join d on (e.deptno=d.dno);
l dno
         I dname
                            | empno | ename | sal
      20
            RESEARCH
      30
            SALES
                                 7499
                                          ALLEN
                                                      1600.00
      30
            SALES
                                 7521
                                          WARD
                                                       1250.00
                                          JONES
MARTIN
      20
            RESEARCH
                                 7566
      30
            SALES
                                 7654
                                                       1250.00
      30
            SALES
                                 7698
                                          BLAKE
                                                       2850.00
            ACCOUNTING
RESEARCH
                                          CLARK
SCOTT
                                                       3000.00
      20
                                 7788
      10
            ACCOUNTING
                                 7839
                                          KTNG
                                                       5000.00
            SALES
RESEARCH
                                7844
7876
                                          TURNER
ADAMS
      20
                                                       1100.00
      30
            SALES
                                 7900
                                          JAMES
                                                        950.00
            RESEARCH
ACCOUNTING
                                 7902
7934
                                          FORD
MILLER
                                                       3000.00
      10
                                                       1300.00
      30 j
            SALES
                                7143
                                          RAJESH
                                                       5000.00
15 rows in set (0.00 sec)
mysql> select max(sal) from emp where sal<(select max(sal) form emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'emp'
at line 1
mysql> select max(sal) from emp where sal<(select max(sal) from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at
line 1
mysql> select max(sal) from emp where sal<(select max(sal) from emp);
| max(sal)
   4000.00
```

s.total revenue.

```
1 row in set (0.01 sec)
mysal> with hs as(
              select max(sal) as mx from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at
line 2
mysql> with hs as(
              select max(sal) as mx from emp
        -> )
        -> select max(sal) from emp where sal<(select hs.mx from hs):
| max(sal) |
4000.00
1 row in set (0.00 sec)
mysql> mysql> select max(sal) from emp where sal<(select max(sal) form emp;
mysql mysql mysql select max(sal) from emp where sal<(select max(sal) form emp; check the manual that corresponds to your MySQL server version for the right syntax to use near 'mysql > select max(sal) from emp where sal<(select max(sal) form emp 
              at line 1
'emp' at line 1
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1064 (42000): You have an error in your SQL syntax' at line 1

-> mysql> select max(sal) from emp where sal<(select max(sal) from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the m anual that corresponds to your MySQL server version for the right syntax to use near 'mysql> ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near
mysql> ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1064 (42000): You have an error in your SQL syntax' at line 1

-> mysql> select max(sal) from emp where sal<(select max(sal) from emp);
ERROR 1064 (42000): You have an error in your SQL syntax' at line 1

-> mysql> select max(sal) from emp where sal<(select max(sal) from emp);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the manual that corresponds to your MySQL server version for the right syntax to 'at line 1
        -> | max(sal) |
-> +-----
        -> | 4000.00 |
        -> +------+
-> 1 row in set (0.01 sec)
        ->
        -> mysql> with hs as(
                             select max(sal) as mx from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '+----
I 4000.00 I
mysql> ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near
        at line 2
ERROR 1664 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR
  1064 (42000): You have an error in your SQL syntax' at line 1
-> mysql> with hs as(
-> -> select max(sal) as mx from emp
                     -> )
        ->
                      -> select max(sal) from emp where sal<(select hs.mx from hs);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the manual that corresponds to your MySQL server version for the right syntax to' at line 1
mysql> +-
       -> | max(sal)
        -> | 4000.00 |
        ->
ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '+-
| max(sal) |
      4000.00 |
1 row in set (0' at line 1
mysql>
              -> mysql> with hs as(
->          -> select max(sal) as mx from emp;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '-> my
sql> with hs as(
    -> -> select max(sal) as mx from emp' at line 1
mysql> ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near
'>
        '> | 4000.00 |
'> +-----
        '> 1 row in set (0' at line 1
        -> mysql> ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to u
se near '' at line 2
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the m
anual that corresponds to your MySQL server version for the right syntax to use hear the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1064 (42000): You have an error in your SQL syntax' at line 1
ERROR 1064 (42000): You have an error in your SQL syntax; at line 1

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the manual that corresponds to your MySQL server version for the right syntax to' at line 1

-> -> mysql> with hs as(
-> -> -> select max(sal) as mx from emp
                                   -> )
-> select max(sal) from emp where sal<(select hs.mx from hs);
-> -> select max(sal) from emp where sals(select hs.mx from hs);

ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the m anual that corresponds to your MySQL server version for the right syntax to' at line 1

mysql ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'ERROR 1864 (42000): You have an error in your SQL syntax' at line 1
        -> mysql> +-
        ->
                       -> | max(sal) |
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'the m
anual that corresponds to your MySQL server version for the right syntax to' at line 1
mvsal>
```

mysq1>

```
mysql>
mysql>
mysql>
mysql>
mysql> with recursive num(n) as
       num(n) as
-> (
-> select 1
-> union all
-> select n+1 from num where num.n<5
-> )
-> select *from num;
| n
          1 | 2 |
          3 4 5
5 rows in set (0.00 sec)
mysql> with recursive num(n) as
       -> (
-> select 1
-> union all
-> select n*n from num where num.n<5
-> )
-> )
-> select * from num;
ERROR 3636 (HY000): Recursive query aborted after 1001 iterations. Try increasing @@cte_max_recursion_depth to a larger value.
mysql> with recursive num(n) as
-> (
-> select 1
-> union all
-> select n+1,(n+1)(n+1); from num where num.n<5
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '(n+1) ' at line 5
-> ;
ERROR 1864 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'from num where num.n<5' at line 1 mysql> with recursive num(n,sqr) as
       qu> with recursive num(n,sqr) as
-> (
-> select 1,1
-> union all
-> select n+1,(n+1)*(n+1) from num where n<5
-> )
-> select * from num;
 | n
              | sqr
          1 |
2 |
3 |
4 |
5 |
                       1 4
                      16
                     25
5 rows in set (0.00 sec)
```

mysql>