

MySQL????????????

MySQL 5.5 shunsync sl_history_data DATE
time

1.

shunsync

sql

USE shunsync;

2.

sl_history_data PARTITION BY RANGE time
SQL

sql

```
CREATE TABLE sl_history_data (  
  id INT NOT NULL,  
  time DATE NOT NULL,  
  data VARCHAR(255),  
  PRIMARY KEY (id, time)  
)  
PARTITION BY RANGE (YEAR(time) * 100 + MONTH(time)) (  
  PARTITION p202301 VALUES LESS THAN (202302),  
  PARTITION p202302 VALUES LESS THAN (202303),  
  PARTITION p202303 VALUES LESS THAN (202304),  
  PARTITION p202304 VALUES LESS THAN (202305),  
  PARTITION p202305 VALUES LESS THAN (202306),  
  PARTITION p202306 VALUES LESS THAN (202307),  
  PARTITION p202307 VALUES LESS THAN (202308),  
  PARTITION p202308 VALUES LESS THAN (202309),  
  PARTITION p202309 VALUES LESS THAN (202310),  
  PARTITION p202310 VALUES LESS THAN (202311),  
  PARTITION p202311 VALUES LESS THAN (202312),  
  PARTITION p202312 VALUES LESS THAN (202401)  
);
```

PARTITION BY RANGE YEAR(time) * 100 + MONTH(time)

[illegible]

```
ALTER TABLE sl_history_data
PARTITION BY RANGE (YEAR(time) * 100 + MONTH(time)) (
    PARTITION p202301 VALUES LESS THAN (202302),
    PARTITION p202302 VALUES LESS THAN (202303),
    PARTITION p202303 VALUES LESS THAN (202304),
    PARTITION p202304 VALUES LESS THAN (202305),
    PARTITION p202305 VALUES LESS THAN (202306),
    PARTITION p202306 VALUES LESS THAN (202307),
    PARTITION p202307 VALUES LESS THAN (202308),
    PARTITION p202308 VALUES LESS THAN (202309),
    PARTITION p202309 VALUES LESS THAN (202310),
    PARTITION p202310 VALUES LESS THAN (202311),
    PARTITION p202311 VALUES LESS THAN (202312),
    PARTITION p202312 VALUES LESS THAN (202401)
);
```

sql

```
INSERT INTO sl_history_data (time, attr, value)
VALUES ('2024-10-15 1:01:59', 'noise', '88.888888'),
       ('2024-10-15 3:08:59', 'pm2_5', '66.888888'),
       ('2024-10-15 5:02:59', 'precipitation', '99.888888');
```

```
DELETE FROM sl_history_data
WHERE time BETWEEN '2024-10-14 00:00:00' AND '2024-10-15 23:59:59';
```

5. 练习

练习 MySQL 数据库

```
sql

SELECT * FROM sl_history_data WHERE time BETWEEN '2023-02-01' AND '2023-02-28';

练习 p202302 数据库
```

6. 练习

```
select TABLE_SCHEMA, TABLE_NAME, PARTITION_NAME, TABLE_ROWS from
information_schema.partitions where table_name='sl_history_data';

练习 MySQL 数据库 VALUES LESS THAN 练习 SHOW CREATE
TABLE 练习

SHOW CREATE TABLE sl_history_data;

练习 ALTER TABLE 练习 2024 年 1 月

sql

SHOW CREATE TABLE sl_history_data;

ALTER TABLE sl_history_data
ADD PARTITION (
PARTITION p108 VALUES LESS THAN ('2026-01-01') ENGINE = InnoDB
);
```

练习 2023 年 1 月

```
ALTER TABLE sl_history_data
DROP PARTITION p202301;
```

练习 MySQL 5.5 数据库 DATE 练习 YEAR() 练习 MONTH() 练习