NIELIT Gorakhpur

Course name:A level **SUBJECT:DATABASE TECHNOLOGIES**

Topic:Maria db **DATE:13/4/2020**

Like

This clause is used to specify the data pattern when accessing table data in which an exact match is necessary. It can be combined with the INSERT, UPDATE, SELECT and DELETE statements.

You should pass the pattern of data you are looking for to the clause, and it will return either true or false. Here are the wildcard characters that can be used together with the clause:

- %: for matching either 0 or more characters.
- _: for matching a single character.

Here is the syntax for the LIKE clause:

```
SELECT field_1, field_2,... FROM tableName1, tableName2,...
WHERE fieldName LIKE condition;
```

Let us demonstrate how to use the clause with the % wildcard character. Let us use the Book table with the following records:

```
MariaDB [Demo]> SELECT * FROM book;
+----+---------------+
| id | name          |
+----+---------------+
|  1 | MariaDB Book1 |
|  2 | MariaDB Book2 |
|  3 | MariaDB Book3 |
|  4 | MariaDB Book4 |
|  5 | MariaDB Book5 |
+----+---------------+
5 rows in set (0.001 sec)

MariaDB [Demo]>
```

We need to see all records in which the name begins with M. We can run the following command:

```
SELECT name
FROM book
WHERE name LIKE 'M%';
```

```
MariaDB [Demo]> SELECT name
    -> FROM book
    -> WHERE name LIKE 'M%';
+---------------+
| name          |
+---------------+
| MariaDB Book1 |
| MariaDB Book2 |
| MariaDB Book3 |
| MariaDB Book4 |
| MariaDB Book5 |
+---------------+
5 rows in set (0.054 sec)

MariaDB [Demo]>
```

All records have been returned because their names begin with the letter M. To see all names that end with 4, you can run the following command:

```
SELECT name
FROM book
WHERE name LIKE '%4';
```

```
MariaDB [Demo]> SELECT name
    -> FROM book
    -> WHERE name LIKE '%4';
+---------------+
| name          |
+---------------+
| MariaDB Book4 |
+---------------+
1 row in set (0.002 sec)

MariaDB [Demo]>
```

Only one name has been returned because it's the only one meeting the condition.

We can also surround the search pattern by the wildcard:

```
SELECT name
FROM book
WHERE name LIKE '%DB%';
```

```
MariaDB [Demo]> SELECT name
    -> FROM book
    -> WHERE name LIKE '%DB%';
+---------------+
| name          |
+---------------+
| MariaDB Book1 |
| MariaDB Book2 |
| MariaDB Book3 |
| MariaDB Book4 |
| MariaDB Book5 |
+---------------+
5 rows in set (0.001 sec)

MariaDB [Demo]>
```

Other than the % wildcard, the LIKE clause can be used together with the _ wildcard. This is the underscore wildcard, and it will only look for a single character.

Let's work with the Price table with the following records:

```
MariaDB [Demo]> SELECT * FROM price;
+----+-------+
| id | price |
+----+-------+
|  1 |   250 |
|  2 |   250 |
|  3 |   220 |
|  4 |   190 |
+----+-------+
4 rows in set (0.001 sec)

MariaDB [Demo]>
```

Let us check for the record in which the price is like 1_0. We run the following command:

```
SELECT *
FROM price
WHERE price LIKE '1_0';
```

```
MariaDB [Demo]> SELECT *
    -> FROM price
    -> WHERE price LIKE '1_0';
+----+-------+
| id | price |
+----+-------+
|  4 |   190 |
+----+-------+
1 row in set (0.002 sec)

MariaDB [Demo]>
```

It has returned the record in which the price is 190. We can also try another pattern:

```
SELECT *
FROM price
WHERE price LIKE '_2_';
```

```
MariaDB [Demo]> SELECT *
    -> FROM price
    -> WHERE price LIKE '_2_';
+----+-------+
| id | price |
+----+-------+
|  3 |   220 |
+----+-------+
1 row in set (0.001 sec)

MariaDB [Demo]>
```

It is possible for us to use the LIKE clause together with the NOT operator. This will return all the records that don't meet the specified pattern. For example:

Let us use the Price table with the following records:

```
MariaDB [Demo]> SELECT * FROM price;
+----+-------+
| id | price |
+----+-------+
|  1 |   250 |
|  2 |   250 |
|  3 |   220 |
|  4 |   190 |
+----+-------+
4 rows in set (0.001 sec)

MariaDB [Demo]>
```

Let us find all the records where the price does not start with 2:

```
SELECT *
FROM price
WHERE price NOT LIKE '2%';
```

```
MariaDB [Demo]> SELECT *
    -> FROM price
    -> WHERE price NOT LIKE '2%';
+----+-------+
| id | price |
+----+-------+
|  4 |   190 |
+----+-------+
1 row in set (0.002 sec)

MariaDB [Demo]>
```

Only one record does not meet the specified pattern.

Assignment

1.How to use like clause in MariaDB?