6. MySql – Where clause, Operators

Contents

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1. Where clause

✓ Based on condition we can filter and get matched rows from table.

Login   Login with valid credentials

Query   Get matching rows by using where clause.

```
mysql> select * from persons
    -> where LastName = 'Danial';
```

Output

```
+----------+----------+-----------+---------------------------+-----------+
| PersonID | LastName | FirstName | Address                   | location  |
+----------+----------+-----------+---------------------------+-----------+
|      101 | Danial   | K         | Near to Data Science Area | Hyderabad |
+----------+----------+-----------+---------------------------+-----------+
1 row in set (0.00 sec)
```

Login   Login with valid credentials

Query   where clause with equal operator

mysql> select * from persons
       -> where location = 'hyderabad';

Output

```
+----------+----------+-----------+-------------------------+-----------+
| PersonID | LastName | FirstName | Address                 | location  |
+----------+----------+-----------+-------------------------+-----------+
|      101 | Danial   | K         | Near to Data Science Area | Hyderabad |
|      103 | Ranjan   | M         | Near to Python Theatre  | Hyderabad |
|      104 | Prasad   | K         | Near to Python Road     | Hyderabad |
+----------+----------+-----------+-------------------------+-----------+
3 rows in set (0.00 sec)
```

2. Where clause with operators

✓ Below operators we can use with where clause.

Operator	Description
=	Equal
>	Greater than
<	Less than
>=	Greater than or Equal
<=	Less than or Equal
<>	Not Equal, as !=
between	Between a certain range
in	To check multiple possible values in column

2.1. Where clause with greater than operator

- ✓ We can apply where clause with greater than operator on specific column.
- ✓ This returns the matched records from the table.

Login	Login with valid credentials
Query	where clause with greater than operator

mysql> select * from persons
    -> where PersonID > 101;

Output

```
+----------+-----------+-----------+----------------------+-----------+
| PersonID | LastName  | FirstName | Address              | location  |
+----------+-----------+-----------+----------------------+-----------+
|      102 | Nireekshan| D         | Near to AI Theatre   | Bangalore |
|      103 | Ranjan    | M         | Near to Python Theatre| Hyderabad |
|      104 | Prasad    | K         | Near to Python Road  | Hyderabad |
+----------+-----------+-----------+----------------------+-----------+
3 rows in set (0.00 sec)
```

2.2. Where clause with between and operators

- ✓ We can apply where clause with between, and operators.
- ✓ This returns within range of values.
- ✓ Here start and end values are included.

Login   Login with valid credentials

Query   where clause with between and operators

mysql> select * from persons
      -> where PersonID between 101 and 104;

Output

```
+----------+------------+-----------+--------------------------+-----------+
| PersonID | LastName   | FirstName | Address                  | location  |
+----------+------------+-----------+--------------------------+-----------+
|      101 | Danial     | K         | Near to Data Science Area | Hyderabad |
|      102 | Nireekshan | D         | Near to AI Theatre       | Bangalore |
|      103 | Ranjan     | M         | Near to Python Theatre   | Hyderabad |
|      104 | Prasad     | K         | Near to Python Road      | Hyderabad |
+----------+------------+-----------+--------------------------+-----------+
4 rows in set (0.00 sec)
```

2.3. Where clause with like operator

✓ We can apply where clause with like operators.
✓ By using this we can search specific pattern in a column
  o 'h%' it returns starts with h values
  o '%h' it returns ends with h values

Login	Login with valid credentials
Query	where clause with like operator

mysql> select * from persons
  -> where location like 'h%';

Output

```
+----------+----------+-----------+---------------------------+-----------+
| PersonID | LastName | FirstName | Address                   | location  |
+----------+----------+-----------+---------------------------+-----------+
|      101 | Danial   | K         | Near to Data Science Area | Hyderabad |
|      103 | Ranjan   | M         | Near to Python Theatre    | Hyderabad |
|      104 | Prasad   | K         | Near to Python Road       | Hyderabad |
+----------+----------+-----------+---------------------------+-----------+
3 rows in set (0.00 sec)
```

2.4. Where clause with in operator

- ✓ We can apply where clause with in operator.
- ✓ By using this we can get the matched records from the table.

Login   Login with valid credentials

Query   where clause with in operator

mysql> select * from persons
        -> where Lastname in('Nireekshan', 'Danial');

Output

```
+----------+------------+-----------+--------------------------+-----------+
| PersonID | LastName   | FirstName | Address                  | location  |
+----------+------------+-----------+--------------------------+-----------+
|      101 | Danial     | K         | Near to Data Science Area | Hyderabad |
|      102 | Nireekshan | D         | Near to AI Theatre       | Bangalore |
+----------+------------+-----------+--------------------------+-----------+
2 rows in set (0.00 sec)
```

Login   Login with valid credentials

Query   where clause with not in operator

mysql> select * from persons

       -> where Lastname not in('Nireekshan', 'Danial');

Output

```
+----------+----------+-----------+------------------------+-----------+
| PersonID | LastName | FirstName | Address                | location  |
+----------+----------+-----------+------------------------+-----------+
|      103 | Ranjan   | M         | Near to Python Theatre | Hyderabad |
|      104 | Prasad   | K         | Near to Python Road    | Hyderabad |
+----------+----------+-----------+------------------------+-----------+
2 rows in set (0.00 sec)
```

3. Where clause with AND, OR, NOT operators

- ✓ We can use below operators along with where clause
    - o And operator
    - o Or operators
    - o Not operator

3.1. Where clause with and operator

- ✓ If both conditions are true then AND operator returns the matched records.

Login	Login with valid credentials
Query	where clause with and operator

mysql> select * from Persons
    -> where LastName = 'Danial' and location = 'Hyderabad';

Output

```
+----------+----------+-----------+----------------------------+-----------+
| PersonID | LastName | FirstName | Address                    | location  |
+----------+----------+-----------+----------------------------+-----------+
|      101 | Danial   | K         | Near to Data Science Area  | Hyderabad |
+----------+----------+-----------+----------------------------+-----------+
1 row in set (0.00 sec)
```

3.2. Where clause with or operator

✓ If at least one condition is matching from multiple conditions then or operator returns the corresponding records

Login   Login with valid credentials

Query   where clause with and operator

          mysql> select * from Persons
                -> where LastName = 'Prasad' or location = 'UK';

Output

```
+----------+----------+-----------+---------------------+-----------+
| PersonID | LastName | FirstName | Address             | location  |
+----------+----------+-----------+---------------------+-----------+
|      104 | Prasad   | K         | Near to Python Road | Hyderabad |
+----------+----------+-----------+---------------------+-----------+
1 row in set (0.00 sec)
```

3.3. Where clause with not operator

✓ Not operator displays the records if the condition is not true.

Login   Login with valid credentials
Query   where clause with and operator

mysql> select * from Persons
        -> where not location = 'Bangalore';

Output

```
+----------+----------+-----------+-------------------------+-----------+
| PersonID | LastName | FirstName | Address                 | location  |
+----------+----------+-----------+-------------------------+-----------+
|      101 | Danial   | K         | Near to Data Science Area | Hyderabad |
|      103 | Ranjan   | M         | Near to Python Theatre  | Hyderabad |
|      104 | Prasad   | K         | Near to Python Road     | Hyderabad |
+----------+----------+-----------+-------------------------+-----------+
3 rows in set (0.00 sec)
```