

MySQL - REPLACE Query

MySQL REPLACE Statement

In general, if we want to add records into an existing table, we use the MySQL INSERT statement. Likewise, we can also add new records or replace an existing records using the MySQL **REPLACE** statement. The replace statement is similar to the insert statement.

The only difference is, while inserting a record using the insert statement if a existing column has a UNIQUE or PRIMARY KEY constraint, if the new record has same value for this column an error will be generated.

In the case of the REPLACE statement if you try to insert a new column with duplicate value for the column with UNIQUE or PRIMARY KEY constraints the old record will be completely replaced by the new record.

Syntax

Following is the syntax of the MySQL REPLACE statement –

```
REPLACE INTO table_name (column1, column2, column3,...columnN)  
VALUES (value1, value2, value3,...valueN);
```

Example

Let us start with creating a table with name **CUSTOMERS** in MySQL database with primary key constraint on the ID column as shown below

```
CREATE TABLE CUSTOMERS (  
  ID INT NOT NULL,  
  NAME VARCHAR(20) NOT NULL,  
  AGE INT NOT NULL,  
  ADDRESS CHAR (25),  
  SALARY DECIMAL (18, 2),  
  PRIMARY KEY (ID)  
);
```

```
INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES  
(1, 'Ramesh', 32, 'Ahmedabad', 2000.00 ),  
(2, 'Khilan', 25, 'Delhi', 1500.00 );
```

```
select * FROM CUSTOMERS;
```

```
INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES  
(2, 'Kaushik', 23, 'Kota', 2000.00 );
```

Now, use the **REPLACE** statement to replace the existing record in the table –

```
REPLACE INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES  
(2, 'Kaushik', 20, 'Kota', 2000.00 );
```

```
select * from CUSTOMERS;
```

Inserting records using REPLACE statement

When you use the REPLACE statement to insert a record, if that record doesn't match any existing records in the table, it will be added as a new record.

Example

The following query uses **REPLACE** statement to add three new records into the above **CUSTOMERS** table –

```
REPLACE INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES  
(3, 'Chaitali', 25, 'Mumbai', 6500.00 ),  
(4, 'Hardik', 27, 'Bhopal', 8500.00 ),  
(5, 'Komal', 22, 'Hyderabad', 4500.00 );
```

```
SELECT * FROM CUSTOMERS;
```

Replacing a Record Using a Client Program

```
replace_query = "REPLACE INTO table_name (column1, column2, column3,...columnN)
```

```
VALUES (value1, value2, value3,...valueN)"
```

```
cursorObj.execute(replace_query );
```

```
import mysql.connector
```

```
import datetime
```

```
#establishing the connection
```

```
connection = mysql.connector.connect(
```

```
    host='localhost',
```

```
    user='root',
```

```
    password='password',
```

```
    database='tut')
```

```
#Creating a cursor object
```

```
cursorObj = connection.cursor()
```

```
replace_query = "REPLACE INTO tutorials_tbl (tutorial_id, tutorial_title, tutorial_author, submission_date)  
VALUES (3, 'Learning Java', 'John Doe', '2023-07-28')"
```

```
cursorObj.execute(replace_query)
```

```
connection.commit()
```

```
print("REPLACE query executed successfully.")
```

```
cursorObj.close()
```

```
connection.close()
```

