MINOR PROJECT

Delete and Update Queries in SQL

Delete Query:

The Delete command in SQL is a part of the Data Manipulation Language, a sub-language of SQL that allows modification of data in databases. This command is used to delete existing records from a table. Using this, you can either delete specific records based on a condition or all the records from a table. The DELETE statement is used to delete the existing records in the table.

Once a Delete row in MySQL row has been deleted, it cannot be recovered. The Delete query in MySQL can delete more than on row from a table in a single query. This proves to be advantages when removing large number of rows from a database table.

Delete Syntax:

To delete a row in MySQL, the DELETE FROM statement is used:

DELETE FROM 'table_name' [WHERE condition];

DELETE FROM 'table_name' tells MySQL server to remove rows from the table.

[WHERE condition] is optional and is used to put a filter that restricts the number of rows affected by the DELETE syntax MySQL row query.

If the WHERE clause is not used in the MySQL DELETE query, then all the rows in a given table will be deleted.

Example of Delete Query:

The following is the customers table:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	Kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	Hyderabad	4500.00
7	Muffy	24	Indore	10000.00

The following query deletes the record of a customer, whose ID is 6.

DELETE FROM ‘Customers’ WHERE ‘id’ = 6;

Let’s see the current status of customers table.

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	Kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
7	Muffy	24	Indore	10000.00

Deleting All The Records From a Table:

If we want to DELETE all the records from an existing table using the **DELETE** query, we

Simply need to run it without using the **WHERE** clause.

Example:

Following SQL query removes all the records from the CUSTOMERS table −

DELETE FROM ‘Customers’;

OUTPUT:

The output will be displayed as −

Query OK, 4 rows affected (0.13 sec)

Update Query:

The Update command in SQL modifies existing data in a table. This command allows you to change one or more columns for one or more rows in a table. The Update command can be used to update a single field or multiple fields at the same time. It can also be used to update a MySQL table with values from another table.

Update command is a DML command. It is used with WHERE clause. If the WHERE clause is not used, all records will be updated.

Update Syntax:

The basic syntax of the update query in MySQL is shown as below:

UPDATE ‘table_name’ SET ‘column_name’ = ‘new_value’ [WHERE condition];

HERE

UPDATE ‘table_name’ is the command that tells MySQL to update the data in a table.

SET ‘column_name’ = ‘new_value’ are the names and values of the fields to be affected by the update query.

[WHERE condition] is optional and can be used to put a filter that restricts the number of rows affected by the UPDATE MySQL query.

Example of Update Query:

The following is the customers table:

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	Kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	Hyderabad	4500.00
7	Muffy	24	Indore	10000.00

The following query will update the ADDRESS for a customer whose ID number is 6 in the table.

UPDATE ‘customers’ SET ‘ADDRESS’ = ‘Pune’ WHERE ‘ID’= 6;

Let’s see the current status of customers table.

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	32	Ahmedabad	2000.00
2	Khilan	25	Delhi	1500.00
3	Kaushik	23	Kota	2000.00
4	Chaitali	25	Mumbai	6500.00
5	Hardik	27	Bhopal	8500.00
6	Komal	22	Pune	4500.00
7	Muffy	24	Indore	10000.00

Update Multiple Rows and Columns:

Using MySQL UPDATE statement, multiple rows and columns in a table can also be updated. To update multiple rows, specify the condition in a WHERE clause such that only the required rows would satisfy it.

However, to update multiple columns, set the new values to all the columns that need to be updated. In this case, using the WHERE clause would narrow down the records of the table and not using the clause would change all the values in these columns. Modify the all age and salary values the CUSTOMERS table.

UPDATE ‘customers’ SET ‘AGE’ = ‘AGE+5’, ‘SALARY’ = ‘SALARY+3000’;

Let’s see the current status of customers table.

ID	NAME	AGE	ADDRESS	SALARY
1	Ramesh	37	Ahmedabad	5000.00
2	Khilan	30	Delhi	4500.00
3	Kaushik	28	Kota	5000.00
4	Chaitali	30	Mumbai	9500.00
5	Hardik	32	Bhopal	11500.00
6	Komal	27	Pune	7500.00
7	Muffy	29	Indore	13000.00