

SQL | SELECT Query

Select is the most commonly used statement in SQL. The SELECT Statement in SQL is used to retrieve or fetch data from a database. We can fetch either the entire table or according to some specified rules. The data returned is stored in a result table. This result table is also called result-set.

With the SELECT clause of a SELECT command statement, we specify the columns that we want to be displayed in the query result and, optionally, which column headings we prefer to see above the result table.

The select clause is the first clause and is one of the last clauses of the select statement that the database server evaluates. The reason for this is that before we can determine what to include in the final result set, we need to know all of the possible columns that could be included in the final result set.

Sample Table:

Student				
ROLL_NO	NAME	ADDRESS	PHONE	Age
1	Ram	Delhi	XXXXXXXXXX	18
2	RAMESH	GURGAON	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
4	SURESH	Delhi	XXXXXXXXXX	18

Basic Syntax:

```
SELECT column1, column2 FROM table_name  
column1 , column2: names of the fields of the table  
table_name: from where we want to fetch
```

This query will return all the rows in the table with fields column1 , column2.

- **Query to fetch the fields ROLL_NO, NAME, AGE from the table Student:**

```
SELECT ROLL_NO, NAME, AGE FROM Student;
```

Output:

ROLL_NO	NAME	Age
1	Ram	18
2	RAMESH	18
3	SUJIT	20
4	SURESH	18

- **To fetch the entire table or all the fields in the table:**

```
SELECT * FROM table_name;
```

- **To fetch all the fields from the table Student**

```
SELECT * FROM Student;
```

Output:

ROLL_NO	NAME	ADDRESS	PHONE	Age
1	Ram	Delhi	XXXXXXXXXX	18
2	RAMESH	GURGAON	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
4	SURESH	Delhi	XXXXXXXXXX	18

SQL | DELETE Statement

The DELETE Statement in SQL is used to delete existing records from a table. We can delete a single record or multiple records depending on the condition we specify in the WHERE clause.

Basic Syntax:

```
DELETE FROM table_name WHERE some_condition;
```

table_name: name of the table

some_condition: condition to choose particular record.

Sample Table:

Student				
ROLL_NO	NAME	ADDRESS	PHONE	Age
1	Ram	Delhi	XXXXXXXXXX	18
2	RAMESH	GURGAON	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
4	SURESH	Delhi	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
2	RAMESH	GURGAON	XXXXXXXXXX	18

Example Queries:

Deleting single record: Delete the rows where NAME = 'Ram'. This will delete only the first row.

```
DELETE FROM Student WHERE NAME = 'Ram';
```

Output:

The above query will delete only the first row and the table **Student** will now look like,

ROLL_NO	NAME	ADDRESS	PHONE	Age
2	RAMESH	GURGAON	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
4	SURESH	Delhi	XXXXXXXXXX	18
3	SUJIT	ROHTAK	XXXXXXXXXX	20
2	RAMESH	GURGAON	XXXXXXXXXX	18

Deleting multiple records: Delete the rows from the table Student where Age is 20. This will delete 2 rows(third row and fifth row).

```
DELETE FROM Student WHERE Age = 20;
```

Output:

The above query will delete two rows(third row and fifth row) and the table **Student** will now look like

ROLL_NO	NAME	ADDRESS	PHONE	Age
1	Ram	Delhi	XXXXXXXXXX	18
2	RAMESH	GURGAON	XXXXXXXXXX	18
4	SURESH	Delhi	XXXXXXXXXX	18
2	RAMESH	GURGAON	XXXXXXXXXX	18

Delete all of the records: There are two queries to do this as shown below,

```
query1: "DELETE FROM Student";
```

```
query2: "DELETE * FROM Student";
```

Output:

All of the records in the table will be deleted, there are no records left to display. The table **Student** will become empty!