

# SELECT statement examples

Estimated time: 5 min

## Objectives

At the end of this reading, you will learn how to:

- Use various SELECT queries to retrieve data from the database.

## SELECT statement usage

SELECT is classified as a Database Query command used to retrieve information from a database table.

There are various forms in which a SELECT statement is used.

1. The **general syntax** of a SELECT statement retrieves the data under the listed columns from Table\_1. The code is:

1

SELECT COLUMN1, COLUMN2, ... FROM TABLE\_1 ;

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2. To retrieve all columns from a table, use " \* " instead of specifying individual column names. The code below retrieves the entire table.

1

SELECT \* FROM TABLE\_1 ;

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3. Use the **WHERE clause** to filter the required data based on a predicate. The code below filters the response to only the entries that match the predicate.

1

SELECT <COLUMNS> FROM TABLE\_1 WHERE <predicate> ;

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## SELECT examples

Let's look at these codes in action. Below is a database table called 'COUNTRY,' which contains the columns `ID` , `Name` , and `CCode` . Here, `CCode` is a 2 letter country code.

ID	Name	CCode
1	United States of America	US
2	China	CH
3	Japan	JA
4	Germany	GE
5	India	IN
6	United Kingdom	UK
7	France	FR
8	Italy	IT
9	Canada	CA
10	Brazil	BR

### Example #1

When we apply the SELECT code `SELECT * FROM COUNTRY ;` , the query retrieves all rows and columns from the database table named COUNTRY.

- 'SELECT \*' instructs the database to select all columns from the table.
- 'FROM COUNTRY' specifies the table from which to retrieve the data. In this case, it's the "COUNTRY" table, so the entire table appears, as shown below.

Response:

ID	Name	CCode
1	United States of America	US
2	China	CH
3	Japan	JA
4	Germany	GE
5	India	IN
6	United Kingdom	UK
7	France	FR
8	Italy	IT
9	Canada	CA
10	Brazil	BR

### Example #2

The SQL query `SELECT ID, Name FROM COUNTRY ;` retrieves specific columns from a database table named 'COUNTRY'.

- 'SELECT ID, Name' instructs the database to select two specific columns from the table: "ID" and "Name." It will return these two columns for each row that matches the query criteria.
- 'FROM COUNTRY' specifies the table from which to retrieve the data, which is the "COUNTRY" table. The table below shows that only the "ID" and "CCode" columns were retrieved.

Response:

ID	Name
1	United States of America
2	China
3	Japan
4	Germany
5	India
6	United Kingdom
7	France
8	Italy
9	Canada
10	Brazil

### Example #3

The SQL query `SELECT * FROM COUNTRY WHERE ID <= 5 ;` retrieves all columns from the "COUNTRY" table where the value in the "ID" column is less than or equal to 5.

- `SELECT \*` instructs the database to select all columns from the specified table.
- FROM COUNTRY specifies the table from which to retrieve the data, which is the 'COUNTRY' table.
- WHERE ID <= 5 ; is a condition that filters the rows from the table. It will only return rows where the value in the "ID" column is less than or equal to 5. In the table below, you can see that only rows 1-5 were retrieved.

Response:

ID	Name	CCode
1	United States of America	US