

SQL way to count NULL and NOT NULL values ?? in a column

Handling NULL values ??is necessary while analyzing data. Let's learn with TipsMake.com.com how to count blank and non-empty values ??in a column!

Working with **NULL values ??in SQL** is a common challenge for every data analyst and database expert. This is especially true when dealing with NULL as it can be confusing and confusing.

However, it's important to understand what NULL values ??are and what they mean to give you an accurate and comprehensive overview of your data.

What is the SQL value NULL?

A NULL means no value, not zero or space.

Therefore, traditional comparison operators like =, >, and < cannot be used on it. However, if used, the result will be UNKNOWN.

Treat NULL value as an empty field on the left side while creating a record. You can create a table and insert a new column without adding values. Therefore, that field will be a NULL value. NULL values ??can also be inserted into columns of any data type.

To illustrate this, you should create a new SQL table using the syntax below:

```
CREATE TABLE Employee ( FirstName VARCHAR(50), LastName VARCHAR(50), PhoneNum VARCHAR(15), Salary FLOAT
```

The screenshot shows a SQL query window with the following code:

```
CREATE TABLE Employee (
  FirstName VARCHAR(50),
  LastName VARCHAR(50),
  PhoneNum VARCHAR(15),
  Salary FLOAT
);

INSERT INTO Employee (FirstName, LastName, PhoneNum, Salary)
VALUES
  ('Maxwell', 'Ayomide', '812-345-6789', 150000.00),
  ('David', 'Tosin', NULL, 450000.00),
  ('Eben', 'Teniola', '912-345-6789', 590000.00),
  ('Kenneth', 'Olisa', '809-456-8732', NULL),
  ('Esther', 'Oge', NULL, NULL);
```

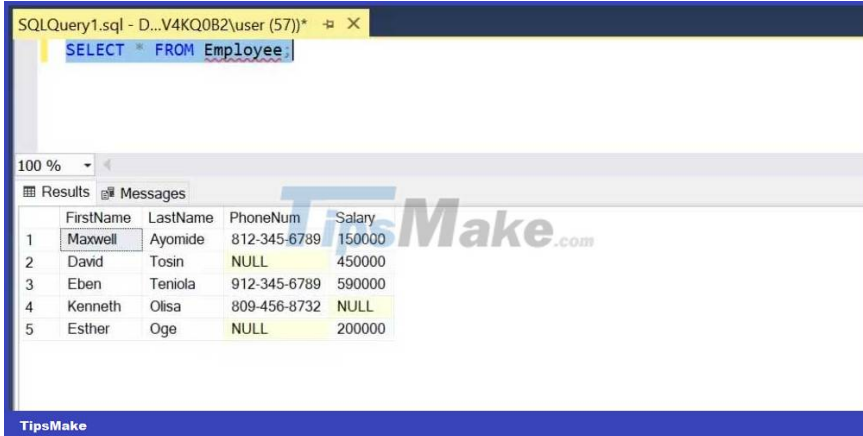
Below the code, the window shows a status bar indicating "(5 rows affected)" and a completion time of "2023-07-15T03:01:24.9862952+01:00".

You can also update NULL values in a table using the beginner-friendly SQL command - UPDATE command. To do this, use the syntax below:

```
UPDATE Employee SET FirstName = 'Esther' WHERE Salary = 200000;
```

To see the results, run:

```
SELECT * FROM Employee;
```



| | FirstName | LastName | PhoneNum | Salary |
|---|-----------|----------|--------------|--------|
| 1 | Maxwell | Ayomide | 812-345-6789 | 150000 |
| 2 | David | Tosin | NULL | 450000 |
| 3 | Eben | Teniola | 912-345-6789 | 590000 |
| 4 | Kenneth | Olisa | 809-456-8732 | NULL |
| 5 | Esther | Oge | NULL | 200000 |

When are SQL NULL values useful?

The value NULL can be used in different situations in SQL:

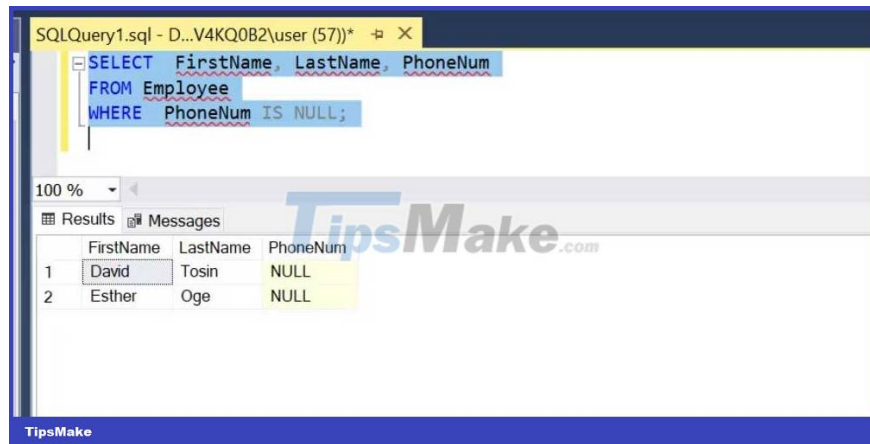
1. When data is not available or not known at the time of data entry.
2. When the data does not apply to the entity in question. For example, in a survey, a question asking participants to check whether they have children in the survey box may have some NULL values.

What is the SQL IS NULL condition?

The SQL IS NULL command is one of the important SQL commands that every programmer needs to know. This command is used to check for NULL values and is best used when you search for NULL values. This command will return all NULL rows in the column specified in your query.

```
SELECT FirstName, LastName, PhoneNum FROM Employee WHERE PhoneNum IS NULL;
```

This query will return all NULL values in the **PhoneNum** column .



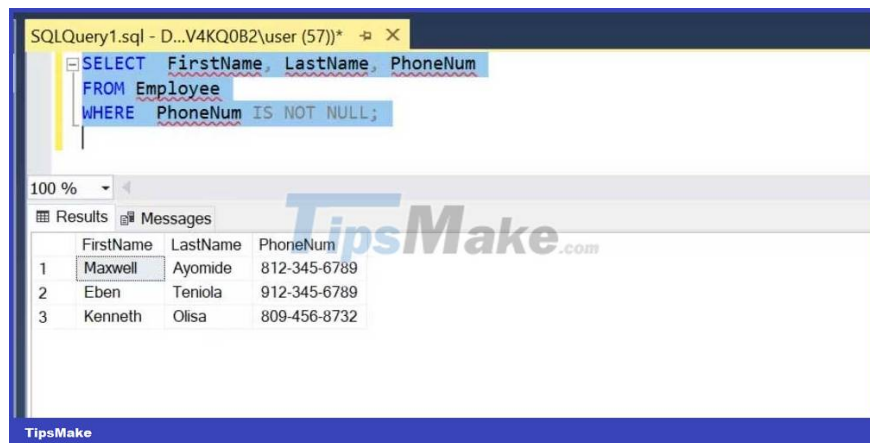
What is the SQL IS NOT NULL condition?

The SQL IS NOT NULL statement is the opposite of SQL IS NULL.

This command checks for non-empty values ??(NOT NULL values). Therefore, it will always return all rows in a column with a value and include all NULL values ??in the column specified in your query.

```
SELECT FirstName, LastName, PhoneNum FROM Employee WHERE PhoneNum IS NOT NULL;
```

This query will return all NOT NULL values ??in the PhoneNum column.



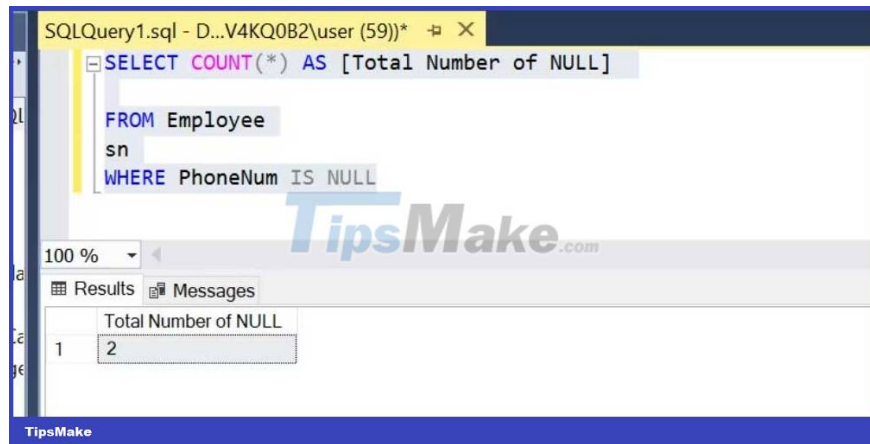
How to count SQL NULL values ??in a column

The COUNT() command is used to count. It is a useful command when analyzing data in SQL tables and working with subqueries & clipboard.

Use this query to count the number of NULL values ??in the **PhoneNum** column .

```
SELECT COUNT(*) AS [Total Number of NULL] FROM Employee WHERE PhoneNum IS NULL
```

You will get the result:

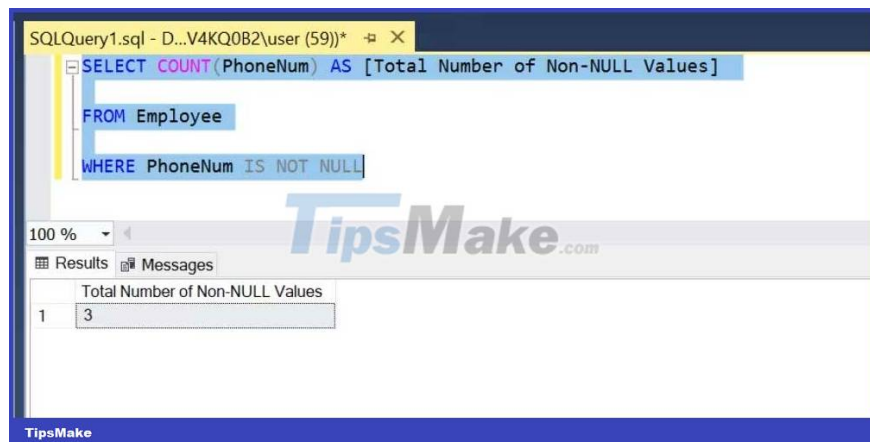


How to count NOT NULL values ??in a column

Use the NOT NULL command to count the number of non-NULL values ??in the **PhoneNum column**.

```
SELECT COUNT(PhoneNum) AS [Total Number of Non-NULL Values] FROM Employee WHERE 1
```

Result:



You can also use this query to place results into a table.

```
SELECT SUM(CASE WHEN PhoneNum is null THEN 1 ELSE 0 END) AS [Number Of Null Values]
```

The screenshot shows a SQL query window with the following text:

```
SELECT SUM(CASE WHEN PhoneNum is null THEN 1 ELSE 0 END)
AS [Number Of Null Values],
COUNT(PhoneNum) AS [Number Of Non-Null Values]
FROM Employee
```

Below the query, the results are displayed in a table:

| | Number Of Null Values | Number Of Non-Null Values |
|---|-----------------------|---------------------------|
| 1 | 2 | 3 |

The interface also shows a zoom level of 100% and a watermark for TipsMake.com.

In this query, the CASE and IS NULL statements are used to classify NULL in the **PhoneNum** column as 1. This value is added and kept in the **Number Of Null Values** column .

Above is **how to count SQL NULL and NOT Null values in a column** . Hope the article is useful to you.

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