

POSTGRESQL - NULL VALUES

http://www.tutorialspoint.com/postgresql/postgresql_null_values.htm

Copyright © tutorialspoint.com

The PostgreSQL **NULL** is the term used to represent a missing value. A NULL value in a table is a value in a field that appears to be blank.

A field with a NULL value is a field with no value. It is very important to understand that a NULL value is different than a zero value or a field that contains spaces.

Syntax:

The basic syntax of using **NULL** while creating a table is as follows:

```
CREATE TABLE COMPANY(  
  ID INT PRIMARY KEY     NOT NULL,  
  NAME           TEXT     NOT NULL,  
  AGE            INT       NOT NULL,  
  ADDRESS        CHAR(50),  
  SALARY         REAL  
);
```

Here, **NOT NULL** signifies that column should always accept an explicit value of the given data type. There are two columns where we did not use NOT NULL. Hence this means these columns could be NULL.

A field with a NULL value is one that has been left blank during record creation.

Example:

The NULL value can cause problems when selecting data, however, because when comparing an unknown value to any other value, the result is always unknown and not included in the final results. Consider the following table, [COMPANY](#) having the following records:

ID	NAME	AGE	ADDRESS	SALARY
1	Paul	32	California	20000.0
2	Allen	25	Texas	15000.0
3	Teddy	23	Norway	20000.0
4	Mark	25	Rich-Mond	65000.0
5	David	27	Texas	85000.0
6	Kim	22	South-Hall	45000.0
7	James	24	Houston	10000.0

Let us use UPDATE statement to set few nullable values as NULL as follows:

```
testdb=# UPDATE COMPANY SET ADDRESS = NULL, SALARY = NULL where ID IN(6,7);
```

Now, COMPANY table should have the following records:

id	name	age	address	salary
1	Paul	32	California	20000
2	Allen	25	Texas	15000
3	Teddy	23	Norway	20000
4	Mark	25	Rich-Mond	65000
5	David	27	Texas	85000
6	Kim	22		
7	James	24		

(7 rows)

Next, let us see the usage of **IS NOT NULL** operator to list down all the records where SALARY is not NULL:

```
testdb=# SELECT ID, NAME, AGE, ADDRESS, SALARY
        FROM COMPANY
        WHERE SALARY IS NOT NULL;
```

Above PostgreSQL statement will produce the following result:

id	name	age	address	salary
1	Paul	32	California	20000
2	Allen	25	Texas	15000
3	Teddy	23	Norway	20000
4	Mark	25	Rich-Mond	65000
5	David	27	Texas	85000

(5 rows)

Following is the usage of **IS NULL** operator which will list down all the records where SALARY is NULL:

```
testdb=# SELECT ID, NAME, AGE, ADDRESS, SALARY
        FROM COMPANY
        WHERE SALARY IS NULL;
```

Above PostgreSQL statement will produce the following result:

id	name	age	address	salary
6	Kim	22		
7	James	24		

(2 rows)