NOT NULL CONSTRAINT

Pre-requisite: **NULL Values in SQL**

The SQL NOT NULL forces particular values or records should not to hold a null value. It is somewhat similar to the primary key condition as the primary key can't have null values in the table although both are completely different things.

In SQL, constraints are some set of rules that are applied to the data type of the specified table, Or we can say that using constraints we can apply limits on the type of data that can be stored in the particular column of the table.

Constraints are typically placed specified along with CREATE statement. By default, a column can hold null values.

Query

```
CREATE TABLE Emp(
    EmpID INT PRIMARY KEY,
    Name VARCHAR(50),
    Country VARCHAR(50),
    Age INT(2),
    Salary INT(10)
);
```

Output

Emp

EmpID	Name	Country	Age	Salary
empty				

If you don't want to have a null column or a null value you need to define constraints like NOT NULL. NOT NULL constraints make sure that a column does not hold null values, or in other words, NOT NULL constraints make sure that you cannot insert a new record or update a record without entering a value to the specified column(i.e., NOT NULL column).

It prevents for acceptance of NULL values. It can be applied to column-level constraints.

Syntax

```
CREATE TABLE table_Name
(
column1 data_type(size) NOT NULL,
column2 data_type(size) NOT NULL,
...
```

```
);
```

SQL NOT NULL on CREATE a Table

In SQL, we can add NOT NULL constraints while creating a table.

For example, the “EMPID” will not accept NULL values when the EMPLOYEES table is created because NOT NULL constraints are used with these columns.

Query

```
CREATE TABLE Emp(
    EmpID INT NOT NULL PRIMARY KEY,
    Name VARCHAR (50),
    Country VARCHAR (50),
    Age INT (2),
    Salary INT (10)
);
```

Output

Field	Type	Null	Key	Default	Extra
EmpID	int	NO	PRI	NULL	
Name	varchar(50)	YES			NULL
Country	varchar(50)	YES			NULL
Age	int	YES		NULL	
Salary	int	YES		NULL	

SQL NOT NULL on ALTER Table

We can also add a NOT NULL constraint in the existing table using the ALTER statement. For example, if the EMPLOYEES table has already been created then add NOT NULL constraints to the “Name” column using ALTER statements in SQL as follows:

Query

```
ALTER TABLE Emp MODIFY Name VARCHAR(50) NOT NULL;
```