

PostgreSQL - CREATE Table

The PostgreSQL CREATE TABLE statement is used to create a new table in any of the given database.

Syntax

Basic syntax of CREATE TABLE statement is as follows –

```
CREATE TABLE table_name(  
    column1 datatype,  
    column2 datatype,  
    column3 datatype,  
    .....  
    columnN datatype,  
    PRIMARY KEY( one or more columns )  
);
```

CREATE TABLE is a keyword, telling the database system to create a new table. The unique name or identifier for the table follows the CREATE TABLE statement. Initially, the empty table in the current database is owned by the user issuing the command.

Then, in brackets, comes the list, defining each column in the table and what sort of data type it is. The syntax will become clear with an example given below.

Examples

The following is an example, which creates a COMPANY table with ID as primary key and NOT NULL are the constraints showing that these fields cannot be NULL while creating records in this table –

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

Let us create one more table, which we will use in our exercises in subsequent chapters –

```
CREATE TABLE DEPARTMENT(
  ID INT PRIMARY KEY     NOT NULL,
  DEPT          CHAR(50) NOT NULL,
  EMP_ID        INT       NOT NULL
);
```

You can verify if your table has been created successfully using `\d` command, which will be used to list down all the tables in an attached database.

```
testdb-# \d
```

The above given PostgreSQL statement will produce the following result –

```
..... List of relations
Schema | Name      | Type  | Owner
-----+-----+-----+-----
public | company   | table | postgres
public | department | table | postgres
(2 rows)
```

Use `\d tablename` to describe each table as shown below –

```
testdb-# \d company
```

The above given PostgreSQL statement will produce the following result –

```
..... Table "public.company"
Column  | Type          | Modifiers
-----+-----+-----
id       | integer       | not null
name     | text          | not null
age      | integer       | not null
address  | character(50) |
salary  | real          |
join_date | date          |
Indexes:
..... "company_pkey" PRIMARY KEY, btree (id)
```