



POSTGRESQL TUTORIAL

CREATE TABLE, INSERT AND SELECT DATA



CREATE TABLE STATEMENT SYNTAX

```
CREATE TABLE table_name (  
column1 datatype(length) column_constraint,  
column2 datatype(length) column_constraint,  
column3 datatype(length) column_constraint,  
table_constraints  
);
```



CREATE TABLE STATEMENT SYNTAX

```
CREATE TABLE  
column1 datatype  
column2 datatype  
column3 datatype  
table_constraint  
);
```



CONSTRAINTS

- ☒ NOT NULL
- ☒ UNIQUE
- ☒ PRIMARY KEY
- ☒ FOREIGN KEY
- ☒ CHECK

constraint,
constraint,
constraint,

create.sql x

insert_customers.sql

create.sql

```
1 CREATE TABLE customers (  
2     customer_id SERIAL PRIMARY KEY,  
3     first_name VARCHAR(255) NOT NULL,  
4     last_name VARCHAR(255) NOT NULL,  
5     email_address VARCHAR(255) NULL,  
6     phone_number INTEGER NOT NULL,  
7     number_of_complaints INTEGER NULL  
8 );
```



POSTGRESQL INCLUDES THE FOLLOWING COLUMN CONSTRAINTS:

- **NOT NULL** – ensures that values in a column cannot be NULL.
- **UNIQUE** – ensures the values in a column unique across the rows within the same table.
- **PRIMARY KEY** – a primary key in a column uniquely identifies a row in a table.
A table can have one and only one primary key.
- **FOREIGN KEY** – A FOREIGN KEY is a key used to link two tables together.
Unlike the primary key, a table can have many foreign keys.
- **CHECK** – a CHECK constraint ensures the data must satisfy a boolean expression.