PostgreSQL - INSERT Query

The PostgreSQL **INSERT INTO** statement allows one to insert new rows into a table. One can insert a single row at a time or several rows as a result of a query.

Syntax

Basic syntax of INSERT INTO statement is as follows −

```
INSERT INTO TABLE_NAME (column1, column2, column3,...columnN)
VALUES (value1, value2, value3,...valueN);
```

- Here, column1, column2,...columnN are the names of the columns in the table into which you want to insert data.
- The target column names can be listed in any order. The values supplied by the VALUES clause or query are associated with the explicit or implicit column list left-to-right.

You may not need to specify the column(s) name in the SQL query if you are adding values for all the columns of the table. However, make sure the order of the values is in the same order as the columns in the table. The SQL INSERT INTO syntax would be as follows −

```
INSERT INTO TABLE_NAME VALUES (value1,value2,value3,...valueN);
```

Output

The following table summarizes the output messages and their meaning −

S. No.	Output Message & Description
1	**INSERT oid 1** Message returned if only one row was inserted. oid is the numeric OID of the inserted row.
2	**INSERT 0 #** Message returned if more than one rows were inserted. # is the number of rows inserted.

Examples

Let us create COMPANY table in **testdb** as follows −

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

The following example inserts a row into the COMPANY table −

```
INSERT INTO COMPANY (ID,NAME,AGE,ADDRESS,SALARY,JOIN_DATE) VALUES (1, 'Paul', 32, 'Cal
```

The following example is to insert a row; here *salary* column is omitted and therefore it will have the default value −

```
INSERT INTO COMPANY (ID,NAME,AGE,ADDRESS,JOIN_DATE) VALUES (2, 'Allen', 25, 'Texas',
```

The following example uses the DEFAULT clause for the JOIN_DATE column rather than specifying a value −

```
INSERT INTO COMPANY (ID,NAME,AGE,ADDRESS,SALARY,JOIN_DATE) VALUES (3, 'Teddy', 23, 'No
```

The following example inserts multiple rows using the multirow VALUES syntax −

```
INSERT INTO COMPANY (ID,NAME,AGE,ADDRESS,SALARY,JOIN_DATE) VALUES (4, 'Mark', 25, 'Ric
```

All the above statements would create the following records in COMPANY table. The next chapter will teach you how to display all these records from a table.

```
ID         NAME         AGE         ADDRESS      SALARY       JOIN_DATE
----       ----------   -----       ----------   -------      --------
1          Paul         32          California   20000.0      2001-07-13
2          Allen        25          Texas                     2007-12-13
3          Teddy        23          Norway       20000.0
4          Mark         25          Rich-Mond    65000.0      2007-12-13
```

```
5        David      27         Texas      85000.0      2007-12-13
```