POSTGRESQL - AUTO INCREMENT

PostgreSQL has the data types *smallserial*, serial and *bigserial*; these are not true types, but merely a notational convenience for creating unique identifier columns. These are similar to AUTO_INCREMENT property supported by some other databases.

If you wish a *serial* column to have a unique constraint or be a primary key, it must now be specified, just like any other data type.

The type name *serial* create *integer* columns. The type name *bigserial* create a *bigint* column. *bigserial* should be used if you anticipate the use of more than 231 identifiers over the lifetime of the table. The type name *smallserial* create a *smallint* column.

Syntax:

The basic usage of **SERIAL** datatype is as follows:

```
CREATE TABLE tablename (
colname SERIAL
);
```

Example:

Consider COMPANY table to be created as follows:

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

Now, insert following records into table COMPANY:

```
INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ( 'Paul', 32, 'California', 20000.00 );

INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ('Allen', 25, 'Texas', 15000.00 );

INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ('Teddy', 23, 'Norway', 20000.00 );

INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ( 'Mark', 25, 'Rich-Mond ', 65000.00 );

INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ( 'David', 27, 'Texas', 85000.00 );


INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ( 'Kim', 22, 'South-Hall', 45000.00 );

INSERT INTO COMPANY (NAME,AGE,ADDRESS,SALARY)
VALUES ( 'James', 24, 'Houston', 10000.00 );
```

This will insert 7 tuples into the table COMPANY and COMPANY will 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 | South-Hall |  45000
  7 | James |  24 | Houston    |  10000
```