

Add an auto increment primary key to an existing table

The screenshot shows the pgAdmin 4 interface. On the left, the 'rank' table is selected under the 'public' schema. The main pane displays the table's structure and data. The table has five columns: 'id' (bigint), 'studentname' (text), 'department' (text), 'cpa' (double precision), and an unnamed column. The data is as follows:

| id | studentname | department | cpa | |
|----|-------------|------------|------|--|
| 1 | aaa | cse | 9.1 | |
| 2 | bbb | eee | 9 | |
| 3 | ccc | eee | 8.9 | |
| 4 | ddd | cse | 8.8 | |
| 5 | eee | eee | 8.7 | |
| 6 | fff | mech | 8.69 | |
| 7 | ggg | it | 8.68 | |
| 8 | hhh | cse | 8.67 | |
| 9 | iii | cse | 8.5 | |
| 10 | jjj | civil | 8.49 | |
| 11 | kkk | civil | 8.43 | |
| 12 | lll | mech | 8.42 | |
| 13 | mmm | cse | 8.41 | |
| 14 | nnn | cse | 8.4 | |
| 15 | ooo | cse | 8 | |

The screenshot shows the pgAdmin 4 interface with the SQL editor open. The following SQL command is entered:

```
1 alter table rank
2 add column rank_id int GENERATED BY DEFAULT AS IDENTITY PRIMARY KEY;
```

The right pane shows the message: "Query returned successfully in 4 secs 190 msec."

pgAdmin 4 interface showing a table named 'rank' in the 'public' schema. The table has 15 rows of data. The columns are: id (bigint), studentname (text), department (text), cgpa (double precision), and rank_id (integer [PK]).

| id | studentname | department | cgpa | rank_id |
|----|-------------|------------|------|---------|
| 1 | aaa | cse | 9.1 | 1 |
| 2 | bbb | eee | 9 | 2 |
| 3 | ccc | eee | 8.9 | 3 |
| 4 | ddd | cse | 8.8 | 4 |
| 5 | eee | eee | 8.7 | 5 |
| 6 | fff | mech | 8.69 | 6 |
| 7 | ggg | it | 8.68 | 7 |
| 8 | hhh | cse | 8.67 | 8 |
| 9 | iii | cse | 8.5 | 9 |
| 10 | jjj | civil | 8.49 | 10 |
| 11 | kkk | civil | 8.43 | 11 |
| 12 | lll | mech | 8.42 | 12 |
| 13 | mmm | cse | 8.41 | 13 |
| 14 | nnn | cse | 8.4 | 14 |
| 15 | ooo | cse | 8 | 15 |

Add an auto increment foreign key to an existing table

pgAdmin 4 interface showing the Query Editor. The SQL code being executed is:

```
1 select * from rank;  
2 select * from two;  
3 alter table two add constraint rank_fk  
4 foreign key(two_id) references rank(rank_id);  
5  
6
```

The Messages pane shows the result of the query:

```
ALTER TABLE  
Query returned successfully in 278 msec.
```

BABIKA A
KloudOne
babianandhan@gmail.com