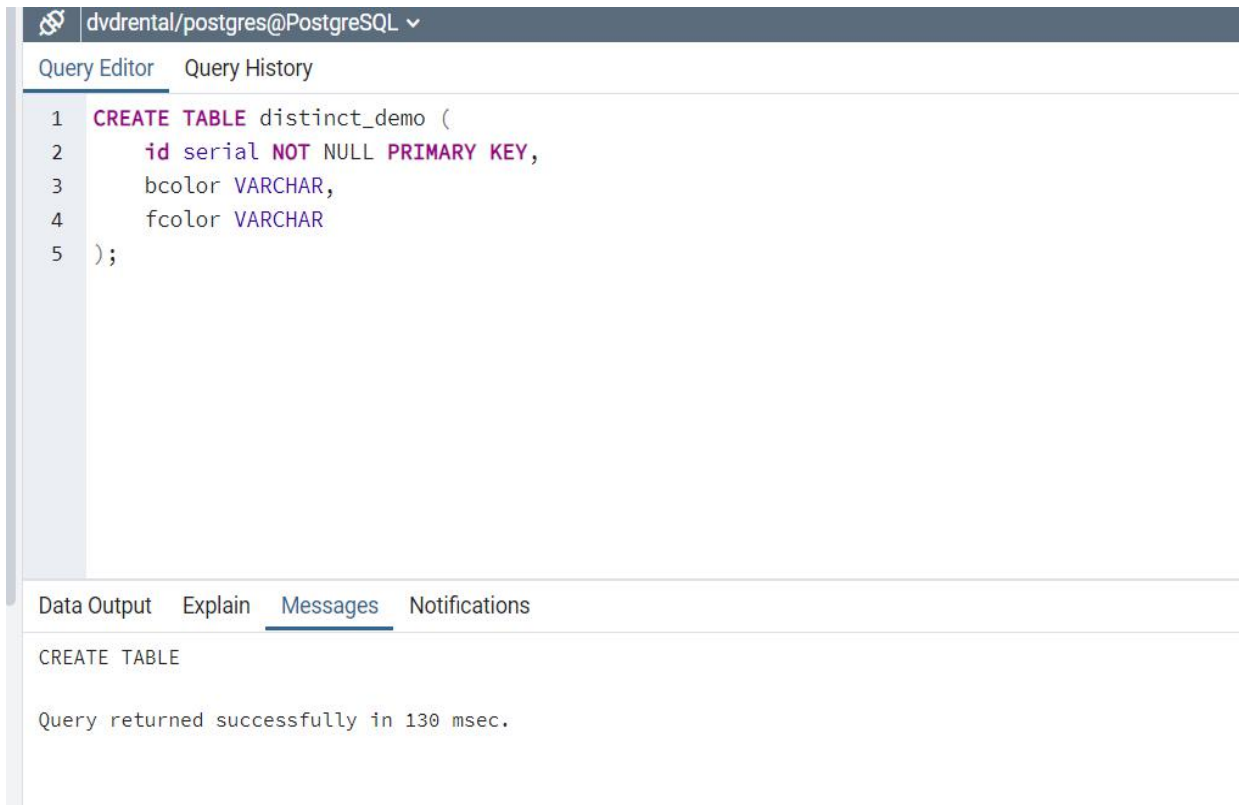


PostgreSQL SELECT DISTINCT

The following **CREATE TABLE** statement to create the **distinct_demo** table that consists of three columns: **id**, **bcolor** and **fcolor**



The screenshot shows a PostgreSQL query editor interface. At the top, the connection is 'dvdrental/postgres@PostgreSQL'. Below the connection bar are tabs for 'Query Editor' and 'Query History'. The 'Query Editor' tab is active, displaying a SQL statement:

```
1 CREATE TABLE distinct_demo (  
2     id serial NOT NULL PRIMARY KEY,  
3     bcolor VARCHAR,  
4     fcolor VARCHAR  
5 );
```

 Below the editor are tabs for 'Data Output', 'Explain', 'Messages', and 'Notifications'. The 'Messages' tab is active, showing the output: 'CREATE TABLE' and 'Query returned successfully in 130 msec.'

```
1 CREATE TABLE distinct_demo (  
2     id serial NOT NULL PRIMARY KEY,  
3     bcolor VARCHAR,  
4     fcolor VARCHAR  
5 );
```

CREATE TABLE

Query returned successfully in 130 msec.

Insert some rows into the **distinct_demo** table using the following **INSERT** statement



The screenshot shows the same PostgreSQL query editor interface. The 'Messages' tab is active, displaying the output of an INSERT statement: 'INSERT 0 12' and 'Query returned successfully in 64 msec.'

```
1 INSERT INTO distinct_demo (bcolor, fcolor)  
2 VALUES  
3     ('red', 'red'),  
4     ('red', 'red'),  
5     ('red', NULL),  
6     (NULL, 'red'),  
7     ('red', 'green'),  
8     ('red', 'blue'),  
9     ('green', 'red'),  
10    ('green', 'blue'),  
11    ('green', 'green'),  
12    ('blue', 'red'),  
13    ('blue', 'green'),  
14    ('blue', 'blue');
```

INSERT 0 12

Query returned successfully in 64 msec.

query the data from the distinct_demo table using the SELECT statement:

Query Editor Query History

```
1
2 --query the data from the distinct_demo table using the SELECT statement:
3 SELECT
4     id,
5     bcolor,
6     fcolor
7 FROM
8     distinct_demo ;
```

Data Output Explain Messages Notifications

| | id [PK] integer | bcolor character varying | fcolor character varying |
|----|--------------------|-----------------------------|-----------------------------|
| 1 | 1 | red | red |
| 2 | 2 | red | red |
| 3 | 3 | red | [null] |
| 4 | 4 | [null] | red |
| 5 | 5 | red | green |
| 6 | 6 | red | blue |
| 7 | 7 | green | red |
| 8 | 8 | green | blue |
| 9 | 9 | green | green |
| 10 | 10 | blue | red |

✓ Successfu

selects unique values in the bcolor column from the t1 table and sorts the result set in alphabetical order by using the ORDER BY clause.

Query Editor Query History

```
1
2
3 SELECT
4     DISTINCT bcolor
5 FROM
6     distinct_demo
7 ORDER BY
8     bcolor;
```

Data Output Explain Messages Notifications

| | bcolor character varying |
|---|-----------------------------|
| 1 | blue |
| 2 | green |
| 3 | red |
| 4 | [null] |

Demonstrates how to use the DISTINCT clause on multiple columns:

| Query Editor | | Query History | Data Output | Explain | Messages | Notifications |
|--------------|--|---------------|------------------------------------|---------|------------------------------------|---------------|
| 1 | | | bcolor character varying | | fcolor character varying | |
| 2 | --PostgreSQL DISTINCT multiple columns | | | | | |
| 3 | SELECT | | 1 | blue | blue | |
| 4 | DISTINCT bcolor, | | 2 | blue | green | |
| 5 | fcolor | | 3 | blue | red | |
| 6 | FROM | | 4 | green | blue | |
| 7 | distinct_demo | | 5 | green | green | |
| 8 | ORDER BY | | 6 | green | red | |
| 9 | bcolor, | | 7 | red | blue | |
| 10 | fcolor; | | 8 | red | green | |
| | | | 9 | red | red | |
| | | | 10 | red | [null] | |
| | | | 11 | [null] | red | |

statement sorts the result set by the bcolor and fcolor, and then for each group of duplicates, it keeps the first row in the returned result set.

| Query Editor | | Query History | Data Output | Explain | Messages | Notifications |
|--------------|-------------------------------------|---------------|------------------------------------|---------|------------------------------------|---------------|
| 1 | | | bcolor character varying | | fcolor character varying | |
| 2 | --PostgreSQL DISTINCT ON example | | | | | |
| 3 | SELECT | | 1 | blue | blue | |
| 4 | DISTINCT ON (bcolor) bcolor, | | 2 | green | blue | |
| 5 | fcolor | | 3 | red | blue | |
| 6 | FROM | | 4 | [null] | red | |
| 7 | distinct_demo | | | | | |
| 8 | ORDER BY | | | | | |
| 9 | bcolor, | | | | | |
| 10 | fcolor; | | | | | |