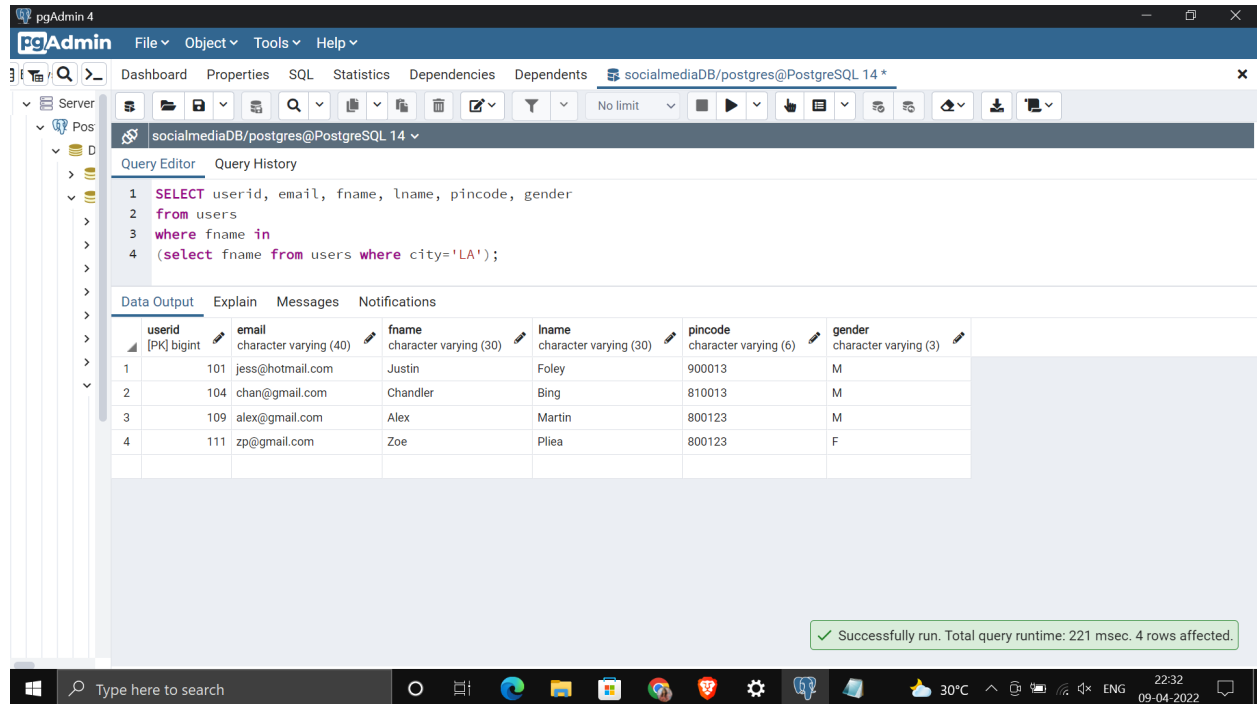


Sub Queries and Nested Queries

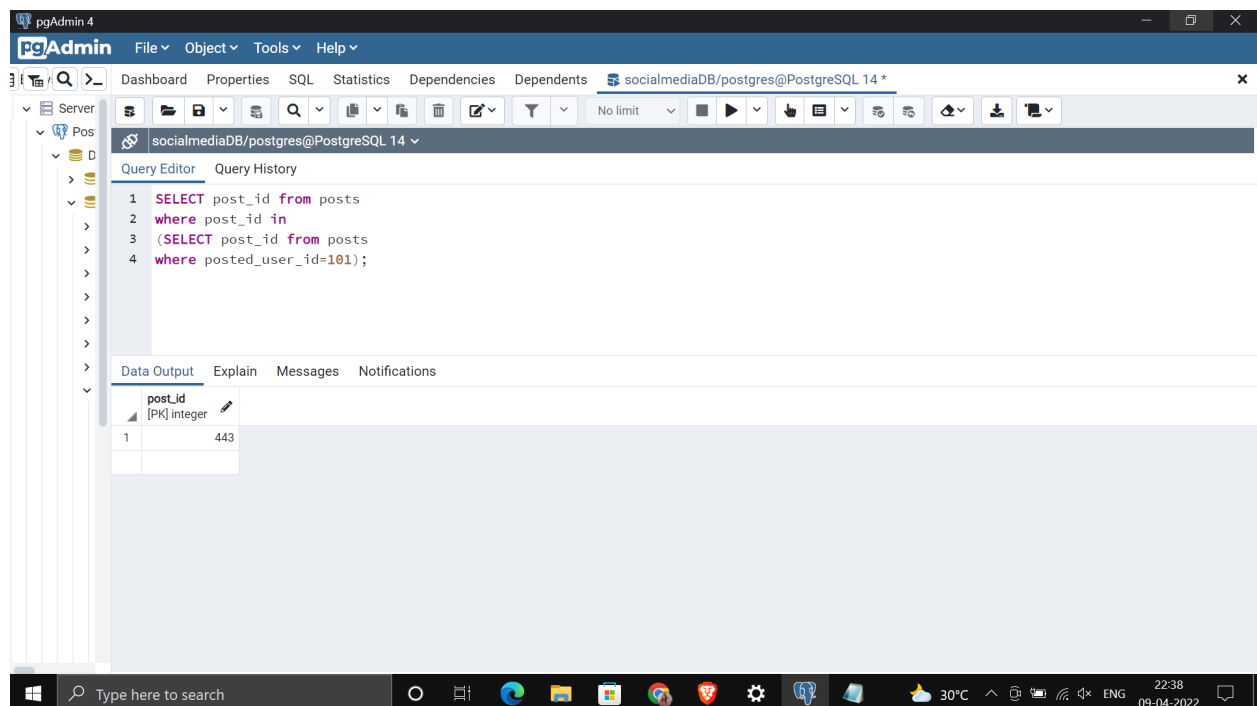


The screenshot shows the pgAdmin 4 interface with a SQL query editor. The query is a SELECT statement with a subquery in the WHERE clause. The subquery selects the fname from the users table where the city is 'LA'. The main query selects the userid, email, fname, lname, pincode, and gender from the users table where the fname is in the list returned by the subquery. The Data Output tab shows the results of the query, which are 4 rows of user data.

```
1 SELECT userid, email, fname, lname, pincode, gender
2 from users
3 where fname in
4 (select fname from users where city='LA');
```

userid [PK] bigint	email character varying (40)	fname character varying (30)	lname character varying (30)	pincode character varying (6)	gender character varying (3)	
1	101	jess@hotmail.com	Justin	Foley	900013	M
2	104	chan@gmail.com	Chandler	Bing	810013	M
3	109	alex@gmail.com	Alex	Martin	800123	M
4	111	zp@gmail.com	Zoe	Pliea	800123	F

Successfully run. Total query runtime: 221 msec. 4 rows affected.



The screenshot shows the pgAdmin 4 interface with a SQL query editor. The query is a SELECT statement with a nested subquery in the WHERE clause. The subquery selects the post_id from the posts table where the posted_user_id is 101. The main query selects the post_id from the posts table where the post_id is in the list returned by the subquery. The Data Output tab shows the results of the query, which is 1 row of post data.

```
1 SELECT post_id from posts
2 where post_id in
3 (SELECT post_id from posts
4 where posted_user_id=101);
```

post_id [PK] integer	
1	443

pgAdmin 4

File Object Tools Help

Dashboard Properties SQL Statistics Dependencies Dependents socialmediaDB/postgres@PostgreSQL 14 *

socialmediaDB/postgres@PostgreSQL 14

Query Editor Query History

```
1 SELECT post_id from posts
2 where post_id in
3 (SELECT post_id from posts);
```

Data Output Explain Messages Notifications

	post_id [PK] integer
1	443
2	542
3	422
4	546

Type here to search

30°C 22:40 09-04-2022

pgAdmin 4

File Object Tools Help

Dashboard Properties SQL Statistics Dependencies Dependents socialmediaDB/postgres@PostgreSQL 14 *

socialmediaDB/postgres@PostgreSQL 14

Query Editor Query History

```
1 SELECT email, fname, city, pincode from users
2 where userid >
3 (SELECT userid from users
4 where userid = 103);
```

Data Output Explain Messages Notifications

	email character varying (40)	fname character varying (30)	city character varying (20)	pincode character varying (6)
1	phoebe12@hotmail.com	Phoebe	Denver	912300
2	ross@gmail.com	Ross	Dallas	123000
3	monica@gmail.com	Monica	New York	810013
4	chan@gmail.com	Chandler	LA	810013
5	gunther@gmail.com	Gunther	New York	602120
6	alex@gmail.com	Alex	LA	800123
7	px@gmail.com	Pierson	Denver	710123
8	zp@gmail.com	Zoe	LA	800123

Type here to search

30°C 22:45 09-04-2022

pgAdmin 4

File Object Tools Help

socialmediaDB/postgres@PostgreSQL 14 *

Query Editor Query History

```
1 SELECT userid, MIN(pincode) FROM users
2 GROUP BY userid HAVING MIN(pincode)>
3 (SELECT MIN(pincode) FROM users WHERE userid=109);
```

Data Output Explain Messages Notifications

	userid [PK] bigint	min text
1	101	900013
2	104	810013
3	105	810013
4	106	912300

Type here to search

22:50 09-04-2022

pgAdmin 4

File Object Tools Help

socialmediaDB/postgres@PostgreSQL 14 *

Query Editor Query History

```
1 select * from posts;
```

Data Output Explain Messages Notifications

	post_id [PK] integer	posted_user_id integer	post_date date	post_content character varying (60)
1	443	101	2022-02-01	Good morning friends!
2	542	106	2022-03-02	Welcome to my page
3	422	102	2022-03-03	Hello Feb
4	546	107	2022-01-03	Happy Thursday

Type here to search

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pgAdmin 4

File Object Tools Help

Dashboard Properties SQL Statistics Dependencies Dependents socialmediaDB/postgres@PostgreSQL 14 *

socialmediaDB/postgres@PostgreSQL 14

Query Editor Query History

```
1 select * from postlikes;
```

Data Output Explain Messages Notifications

	post_id [PK] integer	liked_user_id [PK] integer
1	443	102
2	443	107
3	443	103
4	542	106
5	542	105
6	542	102
7	422	107
8	422	101
9	422	103

Type here to search

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pgAdmin 4

File Object Tools Help

Dashboard Properties SQL Statistics Dependencies Dependents socialmediaDB/postgres@PostgreSQL 14 *

socialmediaDB/postgres@PostgreSQL 14

Query Editor Query History

```
1 SELECT userid, email, fname
2 FROM users
3 WHERE pincode>
4 (SELECT MIN(pincode) FROM users);
```

Data Output Explain Messages Notifications

	userid [PK] bigint	email character varying (40)	fname character varying (30)
1	106	phoebe12@hotmail.com	Phoebe
2	101	jess@hotmail.com	Justin
3	105	monica@gmail.com	Monica
4	103	joey@gmail.com	Joey
5	104	chan@gmail.com	Chandler
6	108	gunther@gmail.com	Gunther
7	109	alex@gmail.com	Alex
8	110	px@gmail.com	Pierson
9	111	zp@gmail.com	Zoe

Type here to search

23:06 09-04-2022