



Title

Student(s)	SHABNAM REZAEI
Student Number	5298191
Course	Database Concepts and Applications
Session	
Teacher	
Date	2022-09-05

1. List all the dogs and male turtles.

SELECT species, sex FROM animals

WHERE species='dog' OR (species='turtle' AND sex='M')

ZOO/postgres@PostgreSQL 11

Query Editor

Query History

1

SELECT species, sex FROM animals

2

WHERE species='dog' OR (species='turtle' AND sex='M')

3

4

Data Output

Explain

Messages

Notifications

	species character varying (40)	sex character (1)
1	dog	M
2	turtle	M
3	dog	F
4	dog	M
5	dog	F
6	dog	F
7	dog	F
8	dog	F
9	dog	F
10	dog	F
11	dog	F
12	dog	F
13	dog	F
14	dog	M
15	dog	F
16	dog	M
17	dog	M
18	dog	M
19	dog	M
20	dog	M
21	dog	M
22	turtle	M
23	turtle	M
24	turtle	M

2. List all the female cats and female dogs.

SELECT species, sex FROM animals

WHERE (species='dog' OR species='cat') AND sex='F'

ZOO/postgres@PostgreSQL 11	
Query Editor	Query History
<pre>1 SELECT species, sex FROM animals 2 WHERE (species='dog' OR species='cat') AND sex='F' 3 4</pre>	
Data Output	Explain Messages Notifications
species character varying (40)	sex character (1)
1 cat	F
2 cat	F
3 cat	F
4 dog	F
5 dog	F
6 dog	F
7 dog	F
8 dog	F
9 dog	F
10 dog	F
11 dog	F
12 dog	F
13 dog	F
14 dog	F
15 cat	F
16 cat	F
17 cat	F
18 cat	F
19 cat	F
20 cat	F

3. List all the female dogs and the oldest turtle (name, sex, specie, dob).

SELECT name, sex, species, dob FROM animals

WHERE (species='dog' AND sex='F') OR (species='turtle' AND dob < timestamp '2013-03-15 14:56:00');

ZOO/postgres@PostgreSQL 11

Query Editor

Query History

1

2

3

4

SELECT name, sex, species, dob FROM animals
WHERE (species='dog' AND sex='F') OR (species='turtle' AND dob < timestamp '2013-03-15 14:56:00');

Data Output

Explain

Messages

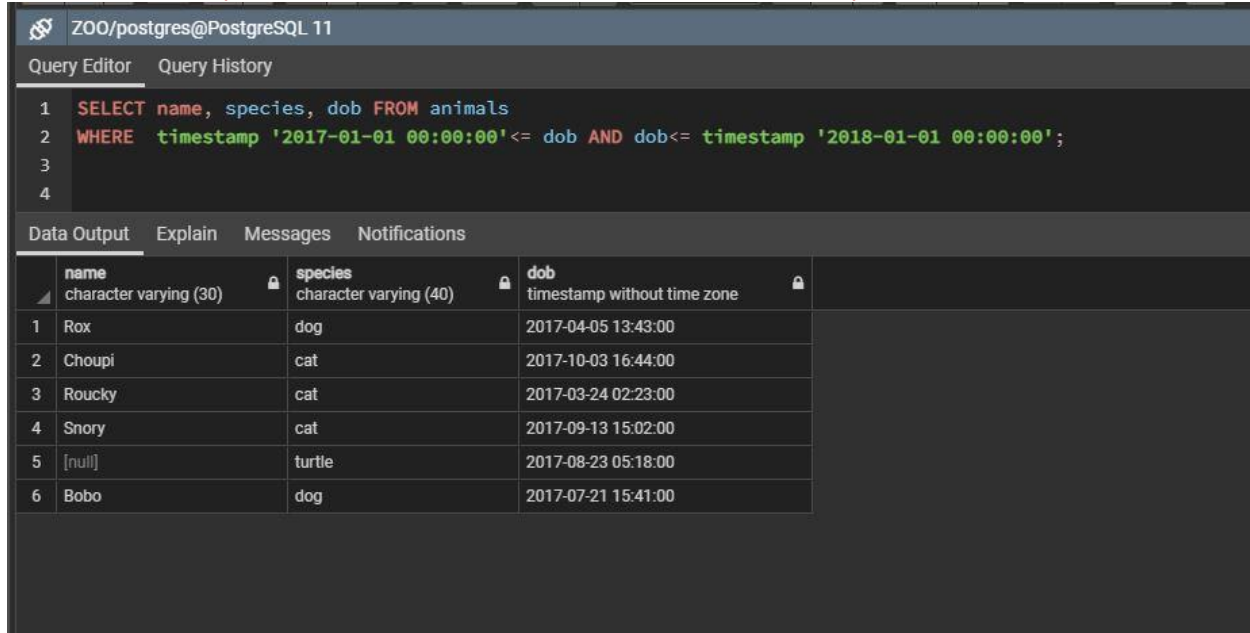
Notifications

	name character varying (30)	sex character (1)	species character varying (40)	dob timestamp without time zone
1	Redbul	F	turtle	2013-03-15 14:26:00
2	Caroline	F	dog	2015-12-06 05:18:00
3	Canaille	F	dog	2015-02-20 15:45:00
4	Cali	F	dog	2016-05-26 08:54:00
5	Rouquine	F	dog	2014-04-24 12:54:00
6	Fila	F	dog	2016-05-26 08:56:00
7	Anyia	F	dog	2015-02-20 15:47:00
8	Louya	F	dog	2016-05-26 08:50:00
9	Welva	F	dog	2015-03-10 13:45:00
10	Zira	F	dog	2014-04-24 12:59:00
11	Java	F	dog	2016-05-26 09:02:00
12	Pataude	F	dog	2015-03-10 13:43:00

4. List the animals born in 2007 (specie, name and date of birth).

SELECT name, species, dob FROM animals

WHERE timestamp '2017-01-01 00:00:00'<= dob AND dob<= timestamp '2018-01-01 00:00:00';



ZOO/postgres@PostgreSQL 11

Query Editor Query History

```
1 SELECT name, species, dob FROM animals
2 WHERE timestamp '2017-01-01 00:00:00'<= dob AND dob<= timestamp '2018-01-01 00:00:00';
3
4
```

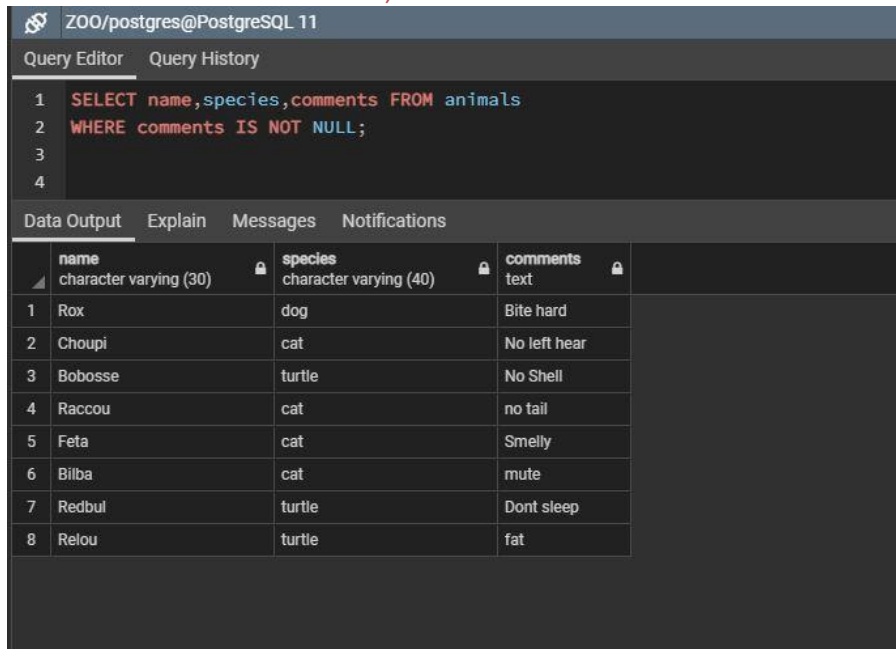
Data Output Explain Messages Notifications

	name character varying (30)	species character varying (40)	dob timestamp without time zone
1	Rox	dog	2017-04-05 13:43:00
2	Choupi	cat	2017-10-03 16:44:00
3	Roucky	cat	2017-03-24 02:23:00
4	Snory	cat	2017-09-13 15:02:00
5	[null]	turtle	2017-08-23 05:18:00
6	Bobo	dog	2017-07-21 15:41:00

5. List the animals with any comments attached to their name (name, specie, comments).

SELECT name,species,comments FROM animals

WHERE comments IS NOT NULL;



ZOO/postgres@PostgreSQL 11

Query Editor Query History

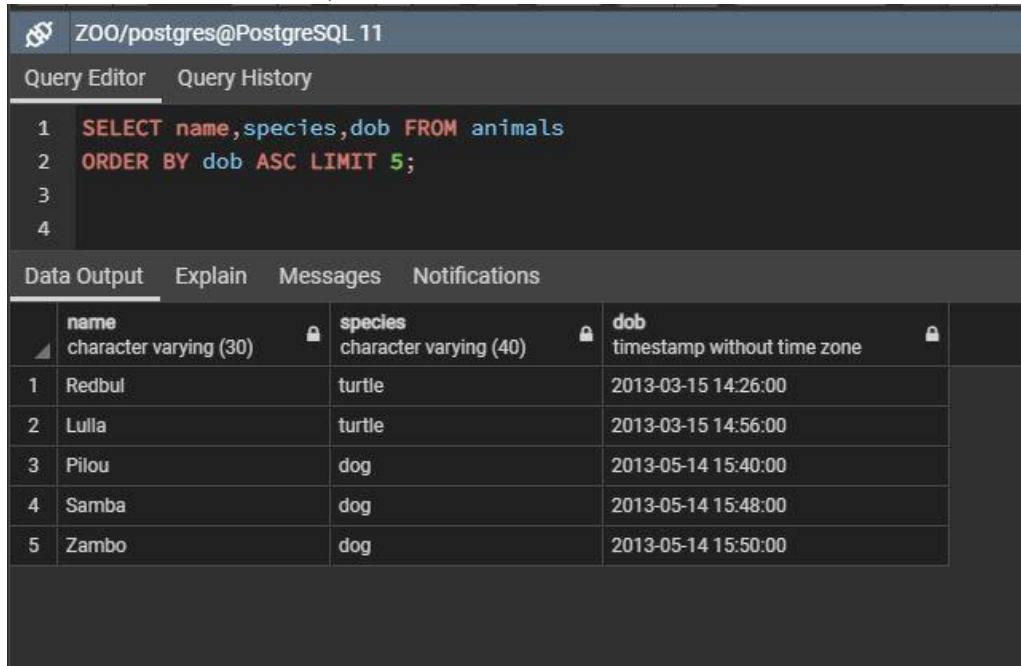
```
1 SELECT name,species,comments FROM animals
2 WHERE comments IS NOT NULL;
3
4
```

Data Output Explain Messages Notifications

	name character varying (30)	species character varying (40)	comments text
1	Rox	dog	Bite hard
2	Choupi	cat	No left hear
3	Bobosse	turtle	No Shell
4	Raccou	cat	no tail
5	Feta	cat	Smelly
6	Bilba	cat	mute
7	Redbul	turtle	Dont sleep
8	Relou	turtle	fat

6. List the 5 oldest animals (name, specie, date of birth).

```
SELECT name,species,dob FROM animals
ORDER BY dob ASC LIMIT 5;
```



The screenshot shows a PostgreSQL query editor interface. At the top, it says 'ZOO/postgres@PostgreSQL 11'. Below that are tabs for 'Query Editor' and 'Query History'. The query editor contains the following SQL code:

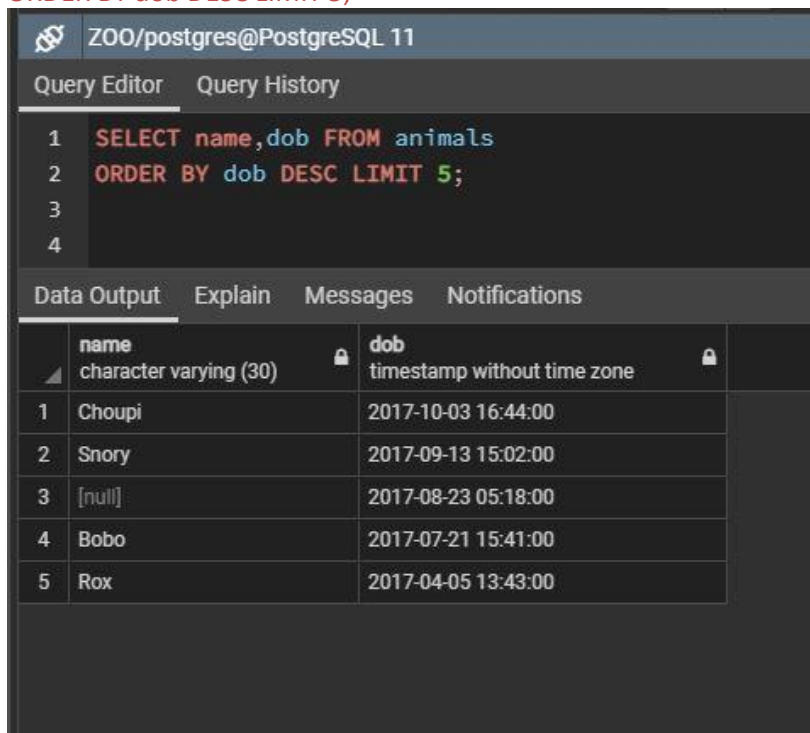
```
1 SELECT name,species,dob FROM animals
2 ORDER BY dob ASC LIMIT 5;
3
4
```

Below the query editor are tabs for 'Data Output', 'Explain', 'Messages', and 'Notifications'. The 'Data Output' tab is active, showing a table with 5 rows of results. The table has columns: 'name' (character varying (30)), 'species' (character varying (40)), and 'dob' (timestamp without time zone). The results are as follows:

	name character varying (30)	species character varying (40)	dob timestamp without time zone
1	Redbul	turtle	2013-03-15 14:26:00
2	Lulla	turtle	2013-03-15 14:56:00
3	Pilou	dog	2013-05-14 15:40:00
4	Samba	dog	2013-05-14 15:48:00
5	Zambo	dog	2013-05-14 15:50:00

7. List the 5 youngest animals (name, dob).

```
SELECT name,dob FROM animals
ORDER BY dob DESC LIMIT 5;
```



The screenshot shows a PostgreSQL query editor interface. At the top, it says 'ZOO/postgres@PostgreSQL 11'. Below that are tabs for 'Query Editor' and 'Query History'. The query editor contains the following SQL code:

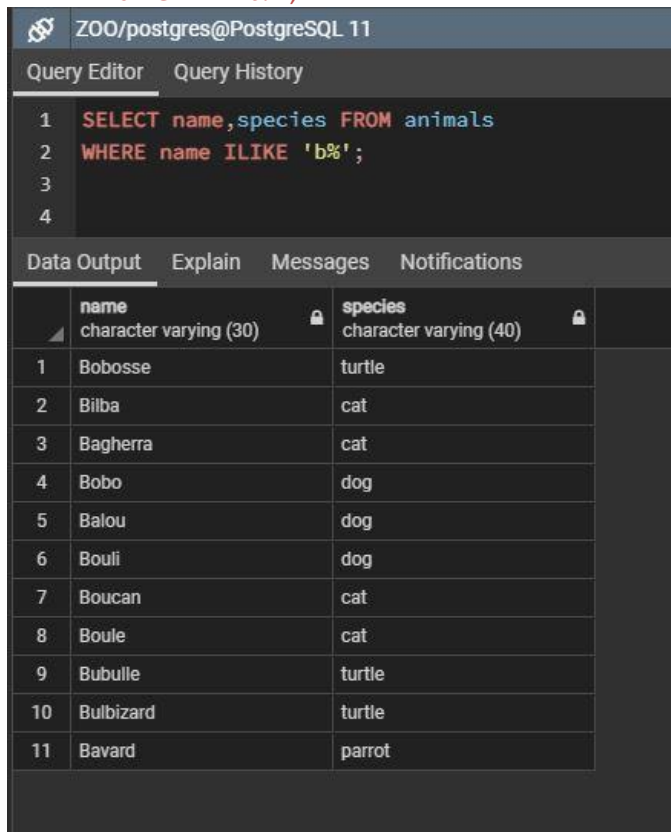
```
1 SELECT name,dob FROM animals
2 ORDER BY dob DESC LIMIT 5;
3
4
```

Below the query editor are tabs for 'Data Output', 'Explain', 'Messages', and 'Notifications'. The 'Data Output' tab is active, showing a table with 5 rows of results. The table has columns: 'name' (character varying (30)) and 'dob' (timestamp without time zone). The results are as follows:

	name character varying (30)	dob timestamp without time zone
1	Choupi	2017-10-03 16:44:00
2	Snory	2017-09-13 15:02:00
3	[null]	2017-08-23 05:18:00
4	Bobo	2017-07-21 15:41:00
5	Rox	2017-04-05 13:43:00

8. List all the animals who's name starts with 'b'.

```
SELECT name,species FROM animals  
WHERE name ILIKE 'b%';
```



The screenshot shows a PostgreSQL query editor window titled 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying the following SQL query:

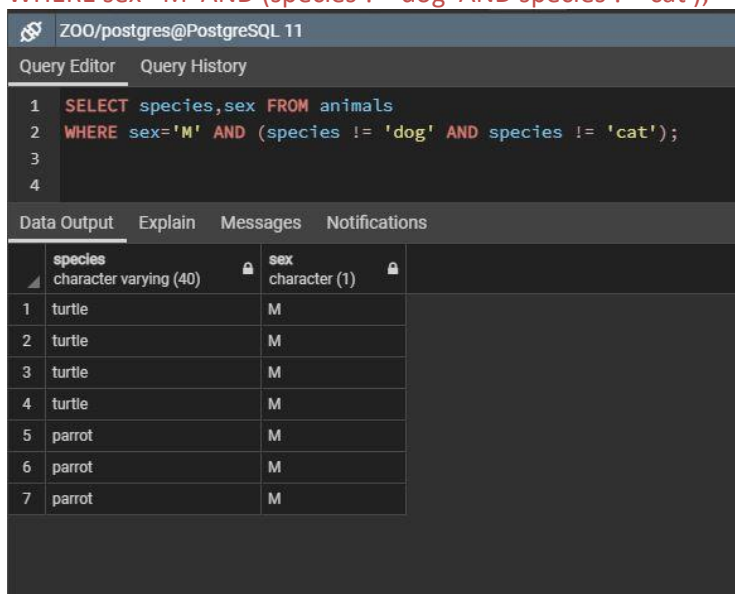
```
1 SELECT name,species FROM animals  
2 WHERE name ILIKE 'b%';  
3  
4
```

Below the query editor, the 'Data Output' tab is active, showing the results of the query in a table format. The table has two columns: 'name' (character varying (30)) and 'species' (character varying (40)). The results are as follows:

	name	species
1	Bobosse	turtle
2	Bilba	cat
3	Bagherra	cat
4	Bobo	dog
5	Balou	dog
6	Bouli	dog
7	Boucan	cat
8	Boule	cat
9	Bubulle	turtle
10	Bulbizard	turtle
11	Bavard	parrot

9. List all the males except for the dogs and the cats.

```
SELECT species,sex FROM animals  
WHERE sex='M' AND (species != 'dog' AND species != 'cat');
```



The screenshot shows a PostgreSQL query editor window titled 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying the following SQL query:

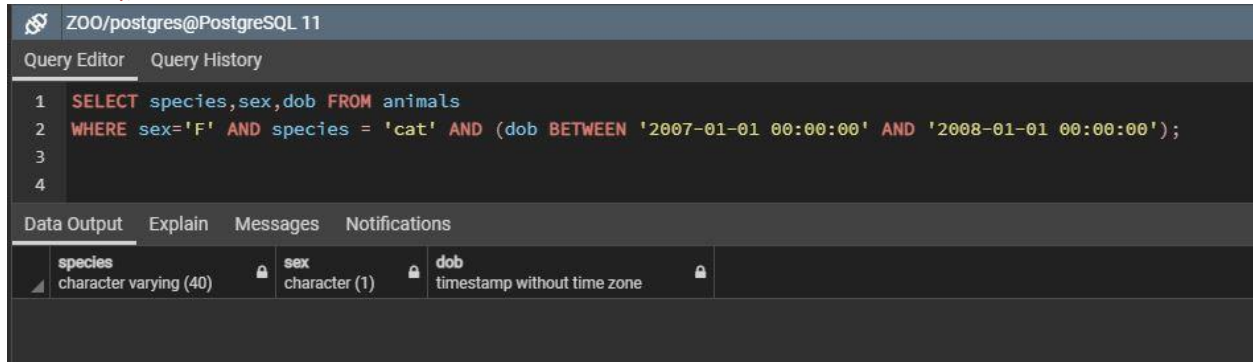
```
1 SELECT species,sex FROM animals  
2 WHERE sex='M' AND (species != 'dog' AND species != 'cat');  
3  
4
```

Below the query editor, the 'Data Output' tab is active, showing the results of the query in a table format. The table has two columns: 'species' (character varying (40)) and 'sex' (character (1)). The results are as follows:

	species	sex
1	turtle	M
2	turtle	M
3	turtle	M
4	turtle	M
5	parrot	M
6	parrot	M
7	parrot	M

10. List all the female cats born between 2007 and 2009.

```
SELECT species,sex,dob FROM animals
WHERE sex='F' AND species = 'cat' AND (dob BETWEEN '2007-01-01 00:00:00' AND '2008-01-01 00:00:00');
```



The screenshot shows a PostgreSQL query editor window titled 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying the following SQL query:

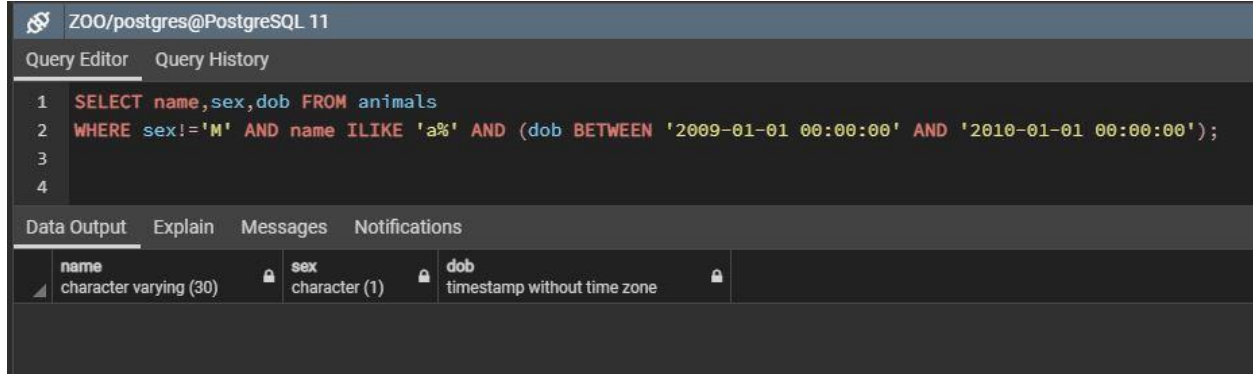
```
1 SELECT species,sex,dob FROM animals
2 WHERE sex='F' AND species = 'cat' AND (dob BETWEEN '2007-01-01 00:00:00' AND '2008-01-01 00:00:00');
3
4
```

Below the query editor, the 'Data Output' tab is active, showing the column definitions for the query result:

species	sex	dob
character varying (40)	character (1)	timestamp without time zone

11. List all the animals who's name ends with a and was born in 2009 and who's not a male.

```
SELECT name,sex,dob FROM animals
WHERE sex!='M' AND name ILIKE 'a%' AND (dob BETWEEN '2009-01-01 00:00:00' AND '2010-01-01 00:00:00');
```



The screenshot shows a PostgreSQL query editor window titled 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying the following SQL query:

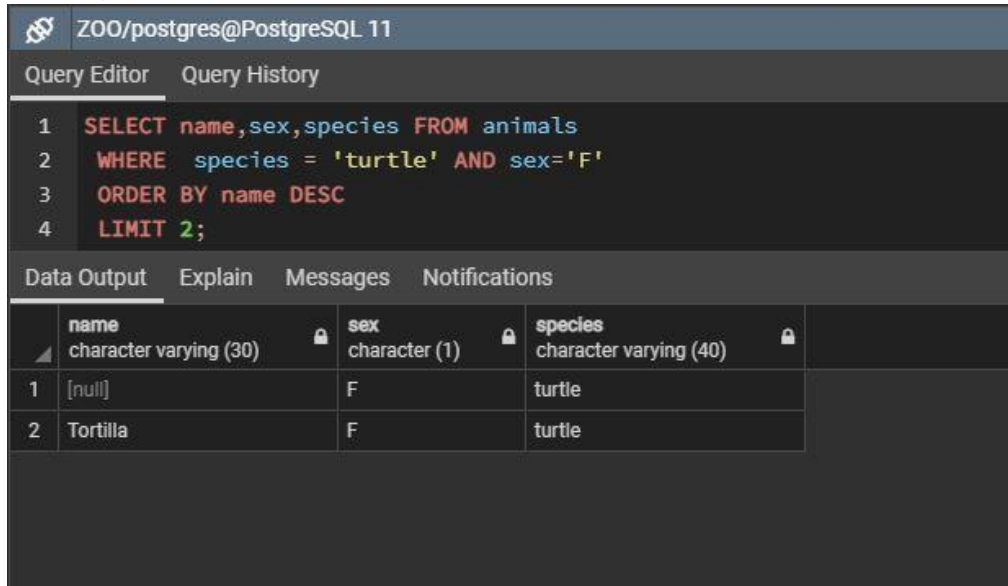
```
1 SELECT name,sex,dob FROM animals
2 WHERE sex!='M' AND name ILIKE 'a%' AND (dob BETWEEN '2009-01-01 00:00:00' AND '2010-01-01 00:00:00');
3
4
```

Below the query editor, the 'Data Output' tab is active, showing the column definitions for the query result:

name	sex	dob
character varying (30)	character (1)	timestamp without time zone

12. List of 2 female turtles sort their name from z-a.

```
SELECT name,sex,species FROM animals
WHERE species = 'turtle' AND sex='F'
ORDER BY name DESC
LIMIT 2;
```

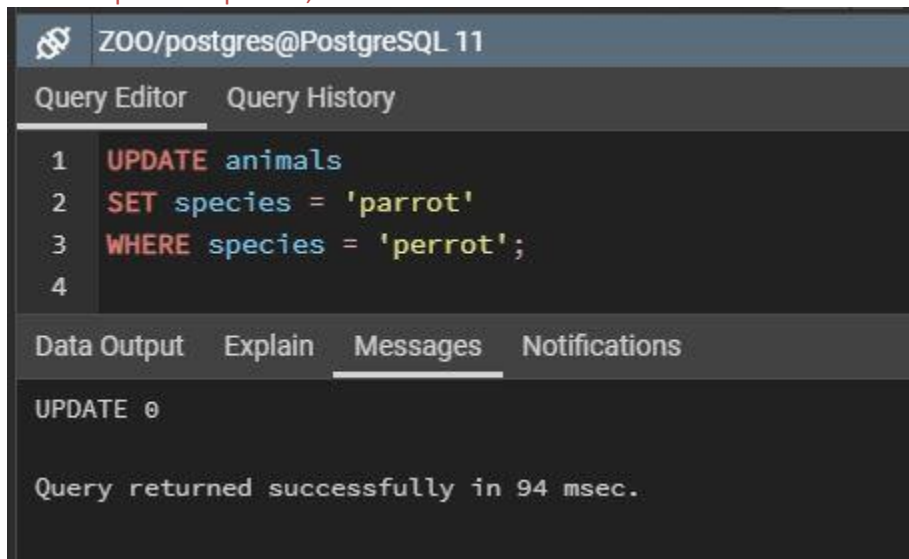


The screenshot shows a PostgreSQL query editor interface. The title bar indicates the user is 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying a SQL query with four lines: 'SELECT name,sex,species FROM animals', 'WHERE species = 'turtle' AND sex='F'', 'ORDER BY name DESC', and 'LIMIT 2;'. Below the query editor, the 'Data Output' tab is active, showing a table with three columns: 'name' (character varying (30)), 'sex' (character (1)), and 'species' (character varying (40)). The table contains two rows of data. The first row has a null name, sex 'F', and species 'turtle'. The second row has the name 'Tortilla', sex 'F', and species 'turtle'.

	name character varying (30)	sex character (1)	species character varying (40)
1	[null]	F	turtle
2	Tortilla	F	turtle

13. Update all the "perrot" to "parrot".

```
UPDATE animals
SET species = 'parrot'
WHERE species = 'perrot';
```



The screenshot shows a PostgreSQL query editor interface. The title bar indicates the user is 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying a SQL query with four lines: 'UPDATE animals', 'SET species = 'parrot'', 'WHERE species = 'perrot';', and an empty line. Below the query editor, the 'Messages' tab is active, showing the execution result: 'UPDATE 0' and 'Query returned successfully in 94 msec.'

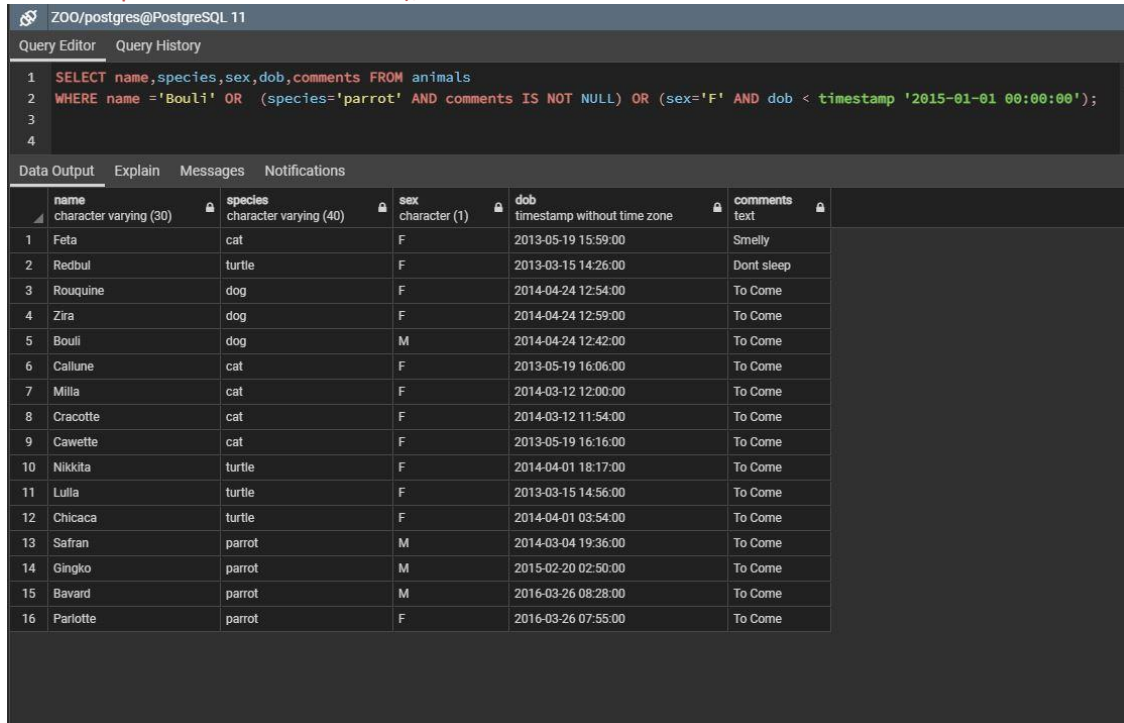
	name character varying (30)	sex character (1)	species character varying (40)
1	[null]	F	turtle
2	Tortilla	F	turtle

UPDATE 0

Query returned successfully in 94 msec.

14. List of the animal called 'Bouli', parrot with comments and all the female born before 2008 (name, sex).

```
SELECT name,species,sex,dob,comments FROM animals
WHERE name ='Bouli' OR (species='parrot' AND comments IS NOT NULL) OR (sex='F' AND dob <
timestamp '2015-01-01 00:00:00');
```



The screenshot shows a PostgreSQL query editor with the following query:

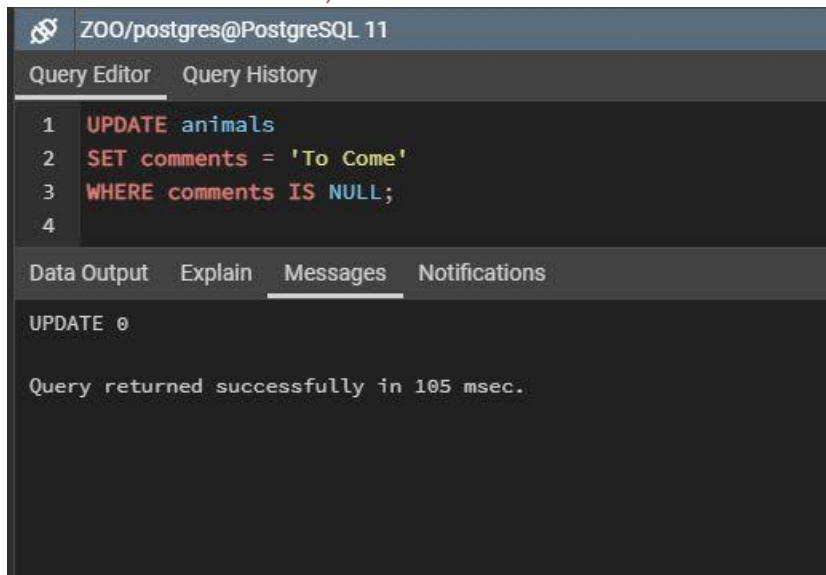
```
1 SELECT name,species,sex,dob,comments FROM animals
2 WHERE name ='Bouli' OR (species='parrot' AND comments IS NOT NULL) OR (sex='F' AND dob < timestamp '2015-01-01 00:00:00');
3
4
```

The results are displayed in a table with the following columns: name, species, sex, dob, and comments. The table contains 16 rows of data.

	name	species	sex	dob	comments
1	Feta	cat	F	2013-05-19 15:59:00	Smelly
2	Redbul	turtle	F	2013-03-15 14:26:00	Dont sleep
3	Rouquine	dog	F	2014-04-24 12:54:00	To Come
4	Zira	dog	F	2014-04-24 12:59:00	To Come
5	Bouli	dog	M	2014-04-24 12:42:00	To Come
6	Callune	cat	F	2013-05-19 16:06:00	To Come
7	Milla	cat	F	2014-03-12 12:00:00	To Come
8	Cracotte	cat	F	2014-03-12 11:54:00	To Come
9	Cawette	cat	F	2013-05-19 16:16:00	To Come
10	Nikkita	turtle	F	2014-04-01 18:17:00	To Come
11	Lulla	turtle	F	2013-03-15 14:56:00	To Come
12	Chicaca	turtle	F	2014-04-01 03:54:00	To Come
13	Safran	parrot	M	2014-03-04 19:36:00	To Come
14	Gingko	parrot	M	2015-02-20 02:50:00	To Come
15	Bavard	parrot	M	2016-03-26 08:28:00	To Come
16	Parlotte	parrot	F	2016-03-26 07:55:00	To Come

15. Change all the "NULL" comments to "To Come"!

```
UPDATE animals
SET comments = 'To Come'
WHERE comments IS NULL;
```



The screenshot shows a PostgreSQL query editor with the following query:

```
1 UPDATE animals
2 SET comments = 'To Come'
3 WHERE comments IS NULL;
4
```

The results are displayed in a table with the following columns: name, species, sex, dob, and comments. The table contains 16 rows of data.

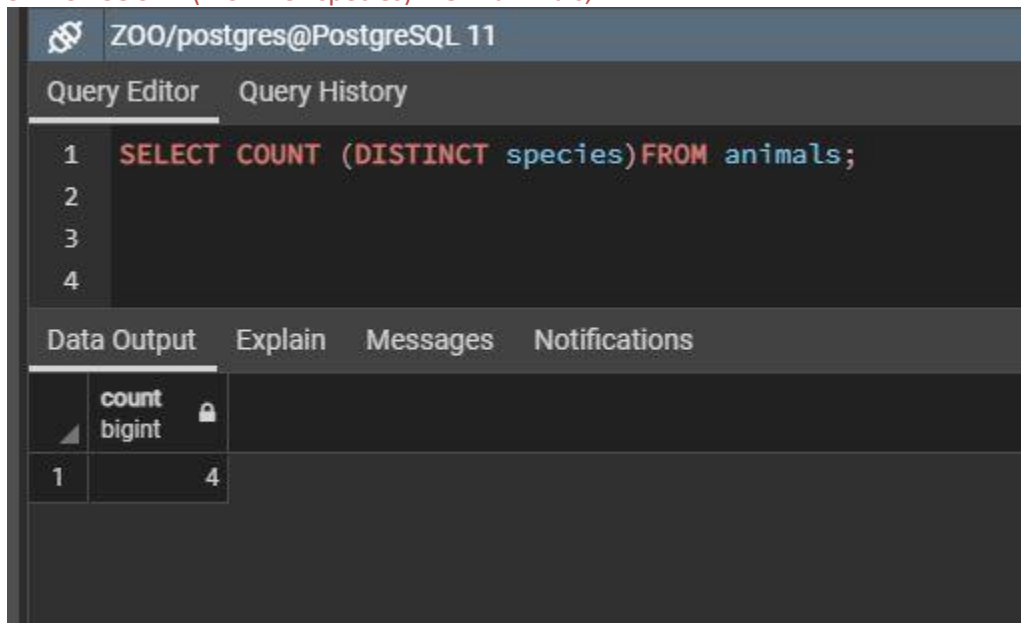
	name	species	sex	dob	comments
1	Feta	cat	F	2013-05-19 15:59:00	Smelly
2	Redbul	turtle	F	2013-03-15 14:26:00	Dont sleep
3	Rouquine	dog	F	2014-04-24 12:54:00	To Come
4	Zira	dog	F	2014-04-24 12:59:00	To Come
5	Bouli	dog	M	2014-04-24 12:42:00	To Come
6	Callune	cat	F	2013-05-19 16:06:00	To Come
7	Milla	cat	F	2014-03-12 12:00:00	To Come
8	Cracotte	cat	F	2014-03-12 11:54:00	To Come
9	Cawette	cat	F	2013-05-19 16:16:00	To Come
10	Nikkita	turtle	F	2014-04-01 18:17:00	To Come
11	Lulla	turtle	F	2013-03-15 14:56:00	To Come
12	Chicaca	turtle	F	2014-04-01 03:54:00	To Come
13	Safran	parrot	M	2014-03-04 19:36:00	To Come
14	Gingko	parrot	M	2015-02-20 02:50:00	To Come
15	Bavard	parrot	M	2016-03-26 08:28:00	To Come
16	Parlotte	parrot	F	2016-03-26 07:55:00	To Come

UPDATE 0

Query returned successfully in 105 msec.

16. How many species exist in total?

`SELECT COUNT (DISTINCT species)FROM animals;`



The screenshot shows a PostgreSQL query editor interface. The title bar indicates the connection is 'ZOO/postgres@PostgreSQL 11'. The 'Query Editor' tab is active, displaying the SQL query: `1 SELECT COUNT (DISTINCT species)FROM animals;`. Below the query editor, the 'Data Output' tab is selected, showing a single row of results. The first column is labeled 'count' with a data type of 'bigint' and a lock icon. The value in this column is '4'.

	count bigint
1	4

17. Surprise me with a cool query!