Programming

Title

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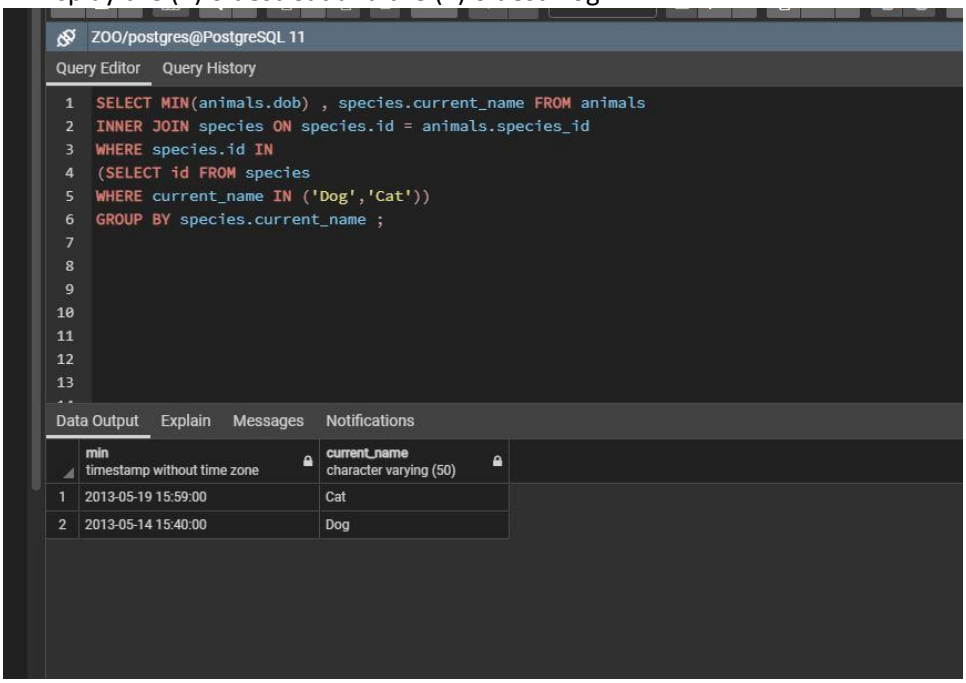
Student Number	5298191
Course	Database Concepts and Applications
Session	
Teacher	
Date	2022-09-14

EASY

1. Display the (1) oldest Cat and the (1) oldest Dog.



2. Display the cats whose id is smaller than it's species's id.

ZOO/postgres@PostgreSQL 11

Query Editor | Query History

```
SELECT animals.id , species.current_name , animals.species_id FROM animals
INNER JOIN species ON animals.id > species.id
WHERE species.id IN
(SELECT id FROM species
WHERE current_name ='Cat')
 ;
```

Data Output | Explain | Messages | Notifications

	id integer	current_name character varying (50)	species_id integer
1	3	Cat	2
2	4	Cat	3
3	5	Cat	2
4	6	Cat	3
5	7	Cat	1
6	8	Cat	2
7	9	Cat	3
8	10	Cat	1
9	11	Cat	1
10	12	Cat	1
11	13	Cat	1
12	14	Cat	1
13	15	Cat	1
14	16	Cat	1
15	17	Cat	1
16	18	Cat	1
17	19	Cat	1
18	20	Cat	1

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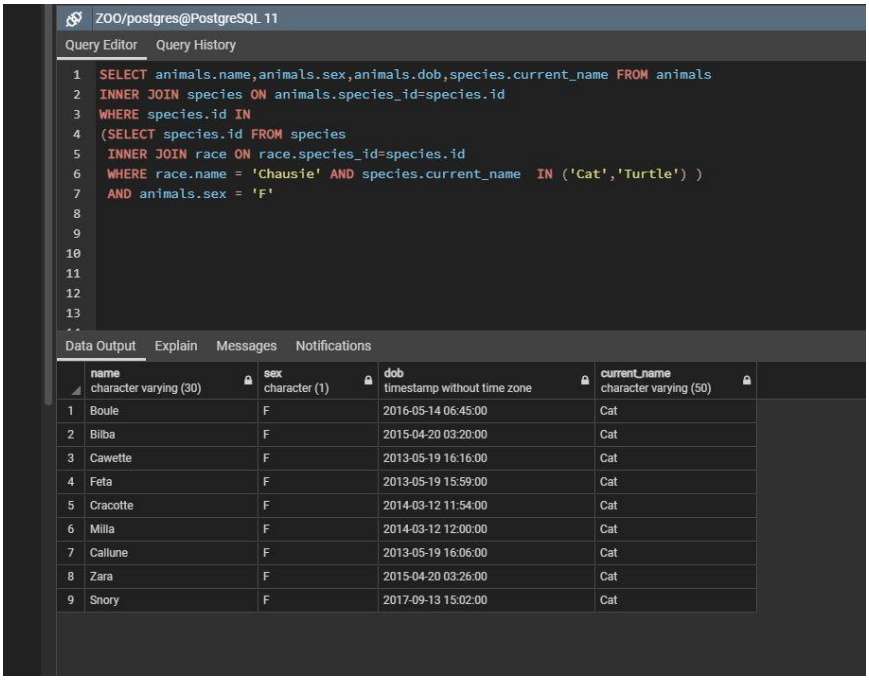
Query Editor | Query History

```
SELECT animals.id , species.current_name , animals.species_id FROM animals
INNER JOIN species ON animals.id < animals.species_id
WHERE species.id IN
(SELECT id FROM species
WHERE current_name ='Cat')
 ;
```

Data Output | Explain | Messages | Notifications

	id integer	current_name character varying (50)	species_id integer

3. List all the female Chausie cats and turtles. (Name, DOB, Sex, Species)



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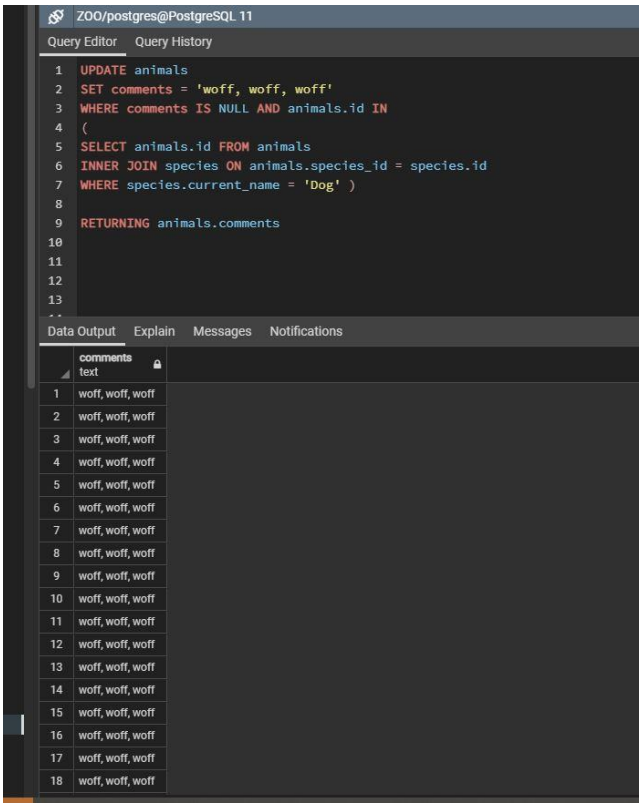
Query Editor | Query History

```
1  SELECT animals.name,animals.sex,animals.dob,species.current_name FROM animals
2  INNER JOIN species ON animals.species_id=species.id
3  WHERE species.id IN
4  (SELECT species.id FROM species
5   INNER JOIN race ON race.species_id=species.id
6   WHERE race.name = 'Chausie' AND species.current_name  IN ('Cat','Turtle') )
7   AND animals.sex = 'F'
8
9
10
11
12
13
```

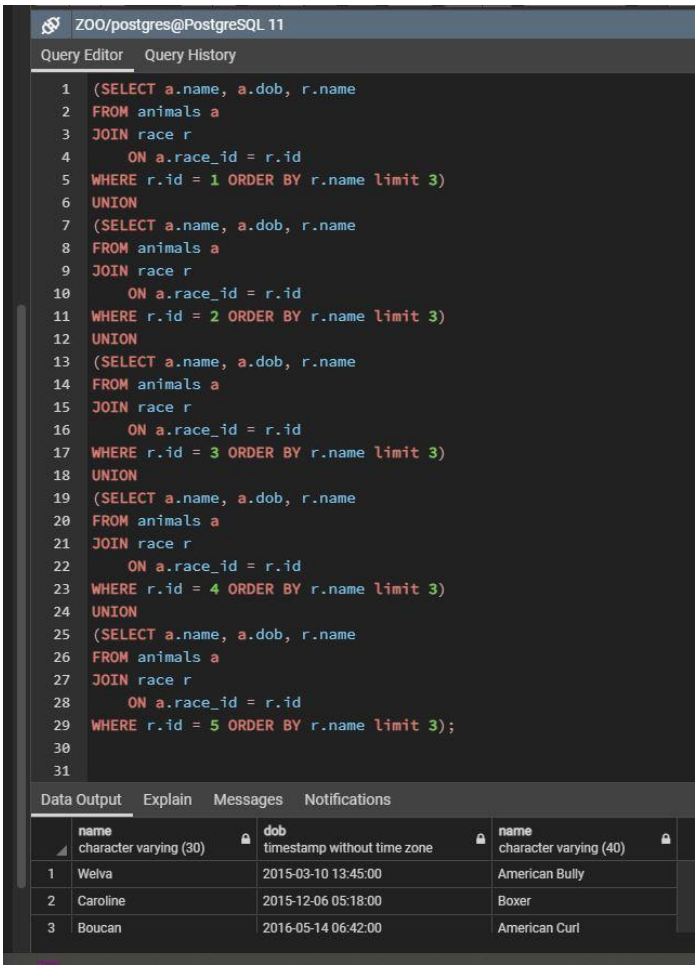
Data Output | Explain | Messages | Notifications

	name character varying (30)	sex character (1)	dob timestamp without time zone	current_name character varying (50)
1	Boule	F	2016-05-14 06:45:00	Cat
2	Bilba	F	2015-04-20 03:20:00	Cat
3	Cawette	F	2013-05-19 16:16:00	Cat
4	Feta	F	2013-05-19 15:59:00	Cat
5	Cracotte	F	2014-03-12 11:54:00	Cat
6	Milla	F	2014-03-12 12:00:00	Cat
7	Callune	F	2013-05-19 16:06:00	Cat
8	Zara	F	2015-04-20 03:26:00	Cat
9	Snory	F	2017-09-13 15:02:00	Cat

4. Update all the dog's nulled comments to "woff, woff, woff"



5. Display the top 3 youngest animals of each race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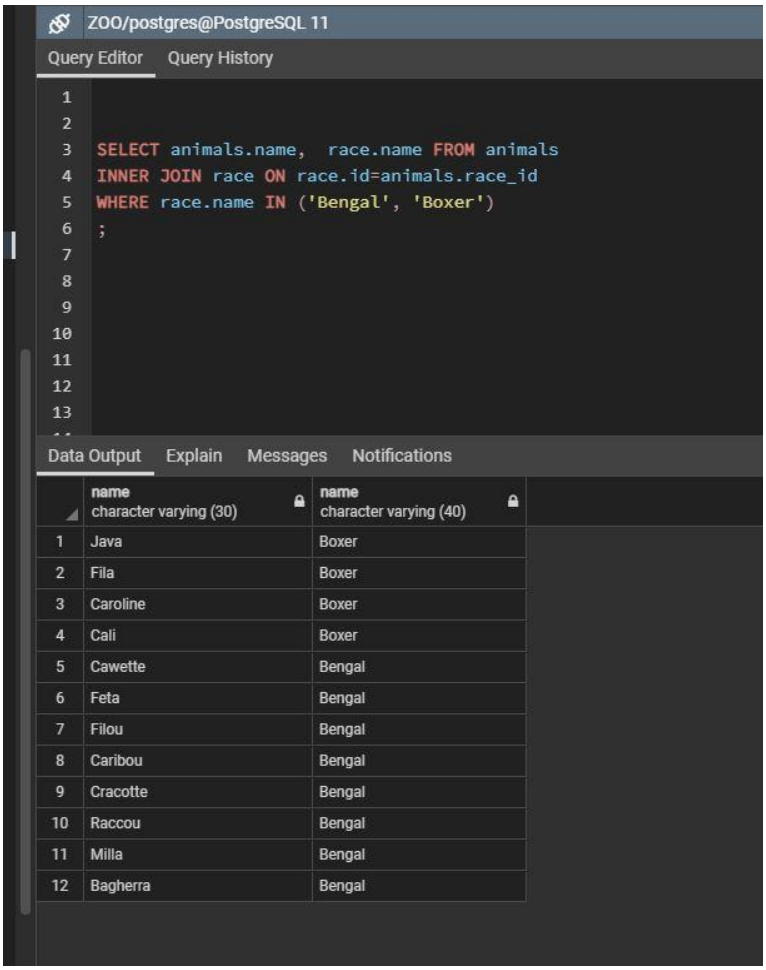
Query Editor
Query History
(SELECT a.name, a.dob, r.name
FROM animals a
JOIN race r
ON a.race_id = r.id
WHERE r.id = 1 ORDER BY r.name limit 3)
UNION
(SELECT a.name, a.dob, r.name
FROM animals a
JOIN race r
ON a.race_id = r.id
WHERE r.id = 2 ORDER BY r.name limit 3)
UNION
(SELECT a.name, a.dob, r.name
FROM animals a
JOIN race r
ON a.race_id = r.id
WHERE r.id = 3 ORDER BY r.name limit 3)
UNION
(SELECT a.name, a.dob, r.name
FROM animals a
JOIN race r
ON a.race_id = r.id
WHERE r.id = 4 ORDER BY r.name limit 3)
UNION
(SELECT a.name, a.dob, r.name
FROM animals a
JOIN race r
ON a.race_id = r.id
WHERE r.id = 5 ORDER BY r.name limit 3);
Data Output
Explain
Messages
Notifications
name character varying (30)
dob timestamp without time zone
name character varying (40)
1 Welva 2015-03-10 13:45:00 American Bully
2 Caroline 2015-12-06 05:18:00 Boxer
3 Boucan 2016-05-14 06:42:00 American Curl

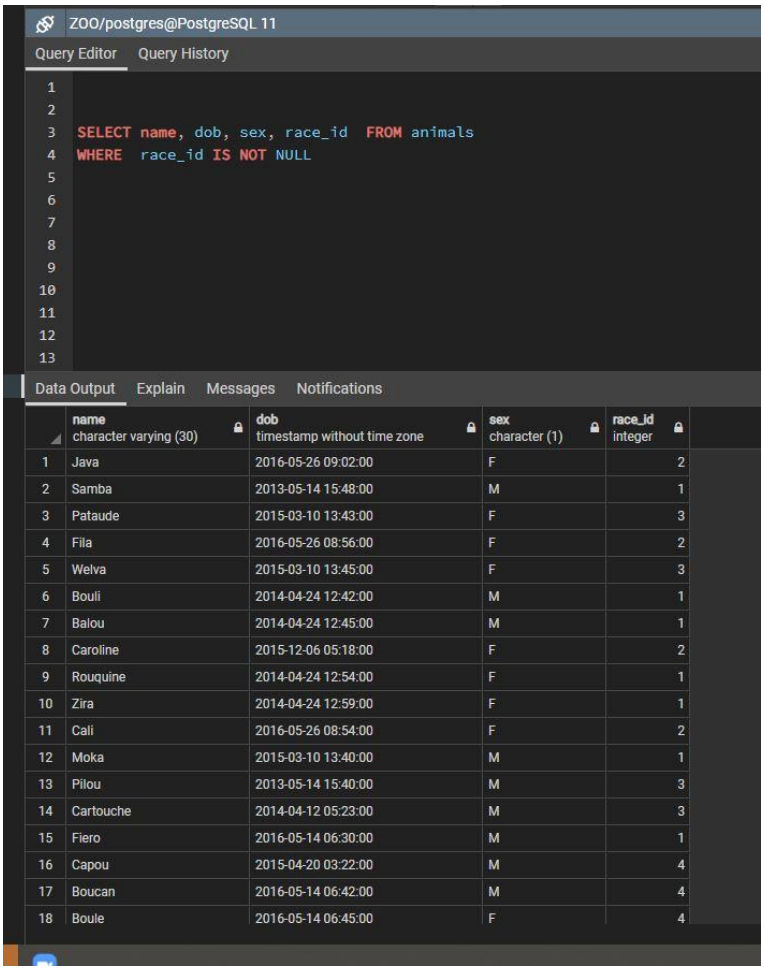
MED

1. List all the Boxer and all the Bengal (Race Name, Animal Name)



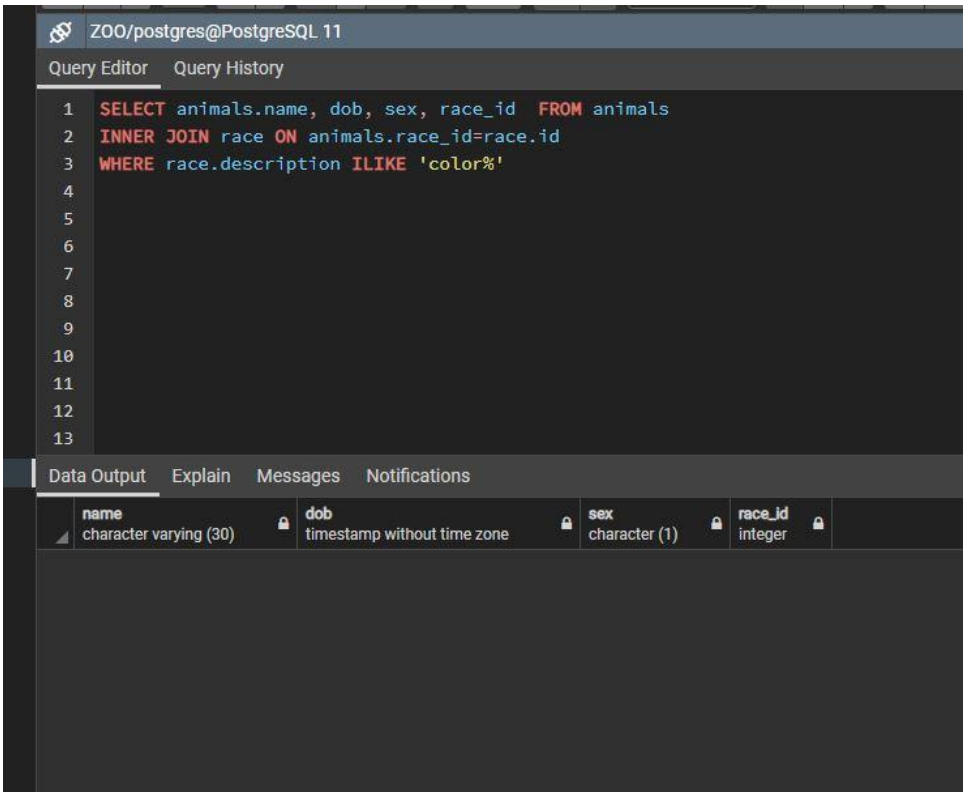
	name character varying (30)	name character varying (40)
1	Java	Boxer
2	Fila	Boxer
3	Caroline	Boxer
4	Cali	Boxer
5	Cawette	Bengal
6	Feta	Bengal
7	Filou	Bengal
8	Caribou	Bengal
9	Cracotte	Bengal
10	Raccou	Bengal
11	Milla	Bengal
12	Bagherra	Bengal

2. List of animals (Name, Sex, DOB, Race_Id) with a race .



	name character varying (30)	dob timestamp without time zone	sex character (1)	race_id integer
1	Java	2016-05-26 09:02:00	F	2
2	Samba	2013-05-14 15:48:00	M	1
3	Pataude	2015-03-10 13:43:00	F	3
4	Fila	2016-05-26 08:56:00	F	2
5	Welva	2015-03-10 13:45:00	F	3
6	Bouli	2014-04-24 12:42:00	M	1
7	Balou	2014-04-24 12:45:00	M	1
8	Caroline	2015-12-06 05:18:00	F	2
9	Rouquine	2014-04-24 12:54:00	F	1
10	Zira	2014-04-24 12:59:00	F	1
11	Cali	2016-05-26 08:54:00	F	2
12	Moka	2015-03-10 13:40:00	M	1
13	Pilou	2013-05-14 15:40:00	M	3
14	Cartouche	2014-04-12 05:23:00	M	3
15	Fiero	2016-05-14 06:30:00	M	1
16	Capou	2015-04-20 03:22:00	M	4
17	Boucan	2016-05-14 06:42:00	M	4
18	Boule	2016-05-14 06:45:00	F	4

3. List of animals (Name, Sex, DOB, Race_Id) whose race has the word color in it.



4. List all the dog and cats and turtle whose name has the letter 'a' in it.

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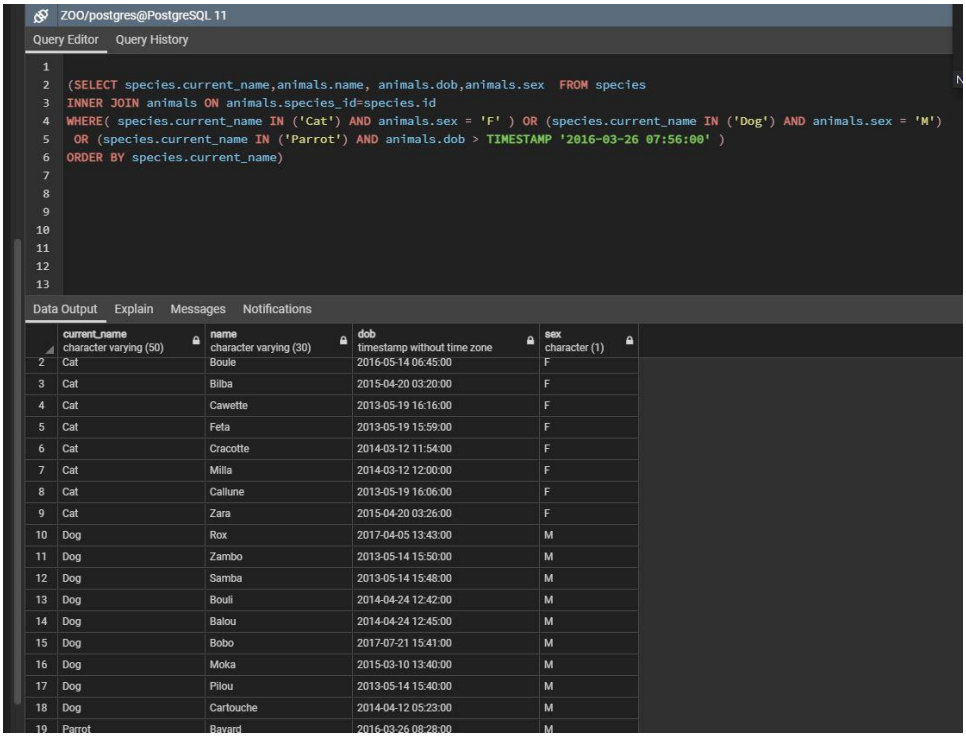
Query Editor | Query History

```
1  SELECT animals.name, animals.species_id , species.current_name FROM animals
2  INNER JOIN species ON animals.species_id=species.id
3  WHERE species.current_name IN ('Dog','Cat','Turtle') AND animals.name ILIKE '%a%'
4
5
6
7
8
9
10
11
12
13
```

Data Output | Explain | Messages | Notifications

	name character varying (30)	species_id integer	current_name character varying (50)
1	Zambo	1	Dog
2	Canaille	1	Dog
3	Java	1	Dog
4	Samba	1	Dog
5	Pataude	1	Dog
6	Fila	1	Dog
7	Welva	1	Dog
8	Balou	1	Dog
9	Caroline	1	Dog
10	Zira	1	Dog
11	Louya	1	Dog
12	Anya	1	Dog
13	Cali	1	Dog
14	Moka	1	Dog
15	Cartouche	1	Dog
16	Tortilla	3	Turtle
17	Lulla	3	Turtle
18	Dana	3	Turtle

5. List all the male dogs, the female cats and the youngest parrot (name, sex, specie, dob), order by species_name



ZOO/postgres@PostgreSQL 11

Query Editor | Query History

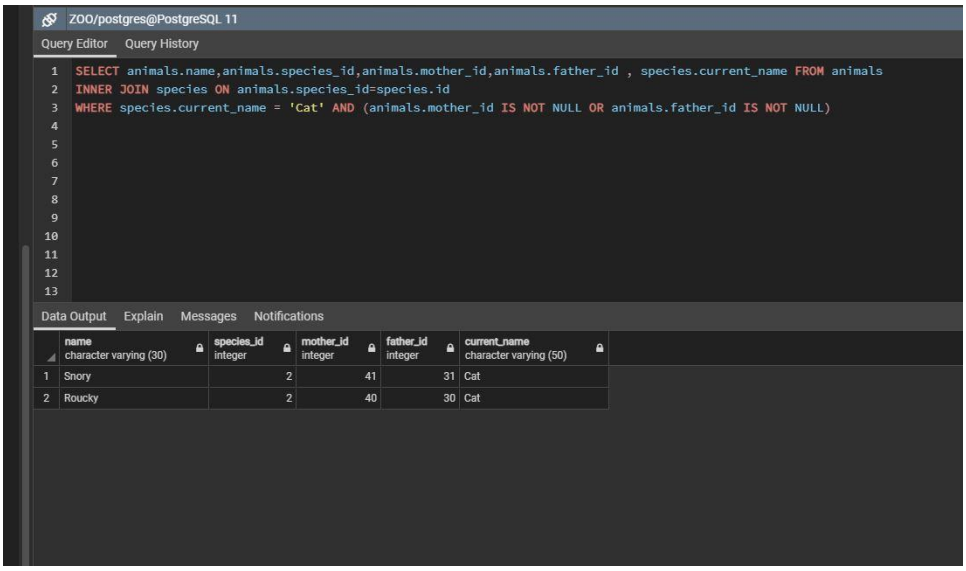
```
(SELECT species.current_name,animals.name, animals.dob,animals.sex  FROM species
INNER JOIN animals ON animals.species_id=species.id
WHERE( species.current_name IN ('Cat') AND animals.sex = 'F' ) OR (species.current_name IN ('Dog') AND animals.sex = 'M')
 OR (species.current_name IN ('Parrot') AND animals.dob > TIMESTAMP '2016-03-26 07:56:00' )
ORDER BY species.current_name)
```

Data Output | Explain | Messages | Notifications

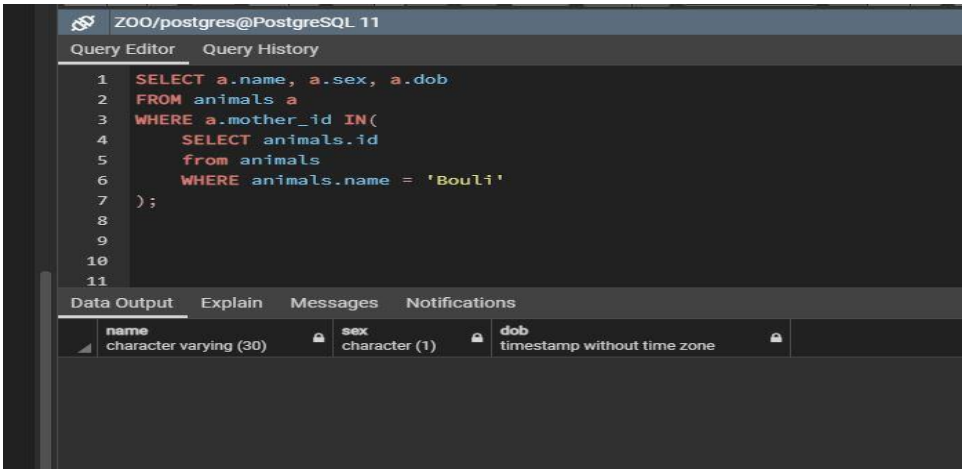
	current_name character varying (50)	name character varying (30)	dob timestamp without time zone	sex character (1)
2	Cat	Boule	2016-05-14 06:45:00	F
3	Cat	Bilba	2015-04-20 03:20:00	F
4	Cat	Cawette	2013-05-19 16:16:00	F
5	Cat	Feta	2013-05-19 15:59:00	F
6	Cat	Cracotte	2014-03-12 11:54:00	F
7	Cat	Milla	2014-03-12 12:00:00	F
8	Cat	Callune	2013-05-19 16:06:00	F
9	Cat	Zara	2015-04-20 03:26:00	F
10	Dog	Rox	2017-04-05 13:43:00	M
11	Dog	Zambo	2013-05-14 15:50:00	M
12	Dog	Samba	2013-05-14 15:48:00	M
13	Dog	Bouli	2014-04-24 12:42:00	M
14	Dog	Balou	2014-04-24 12:45:00	M
15	Dog	Bobo	2017-07-21 15:41:00	M
16	Dog	Moka	2015-03-10 13:40:00	M
17	Dog	Pilou	2013-05-14 15:40:00	M
18	Dog	Cartouche	2014-04-12 05:23:00	M
19	Parrot	Bayard	2016-03-26 08:28:00	M

HARD

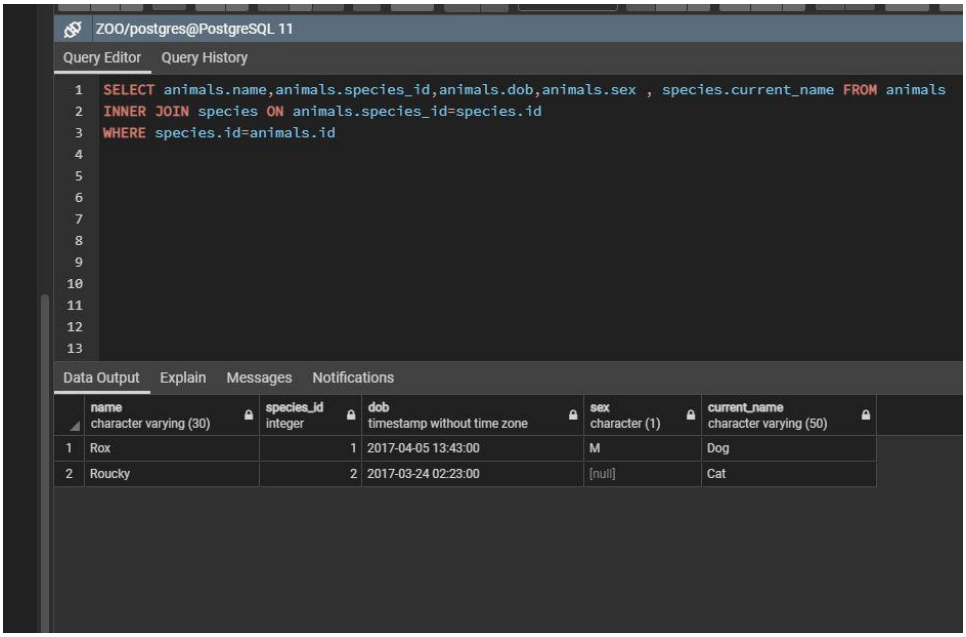
1. List all the Cats who has any parents.



2. List of Bouli's kid(s) (Name, Sex and DOB)



3. List of all the animals whose id matches their species id



4. Insert the following animal in the table:

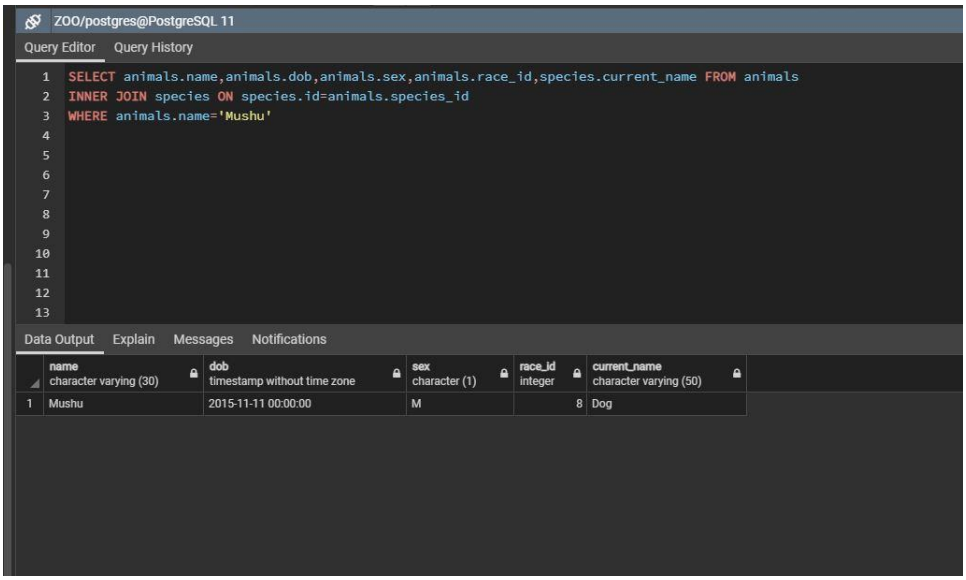
Name : Mushu

DoB : 2015-11-11

Sex : M

Species : Dog

Race : Rottweiller



5. Insert the following animal in the table, on duplicate change the name to 'Musha' and the sex to 'F'

Name : Mushu

DoB : 2015-11-11

Sex : M

Species : Dog

Race : Rottweiller