

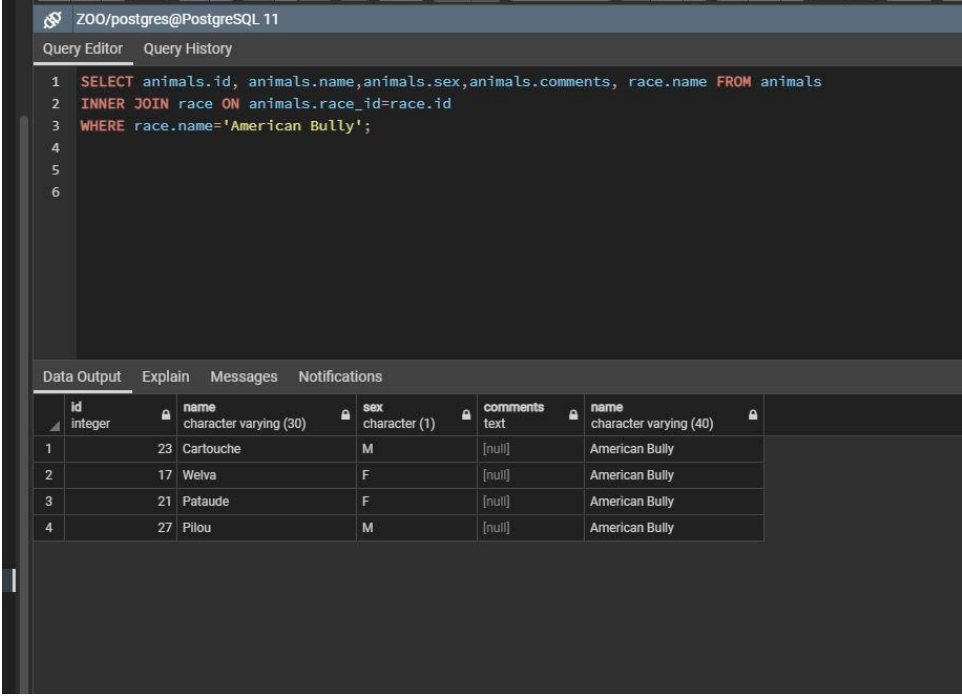


## Title

Student(s)	Shabnam Rezaei
Student Number	5298191
Course	Database Concepts and Applications
Session	
Teacher	
Date	2022-09-11

## Lab 1: EASY

### ☞ List all the American Bully (\*)



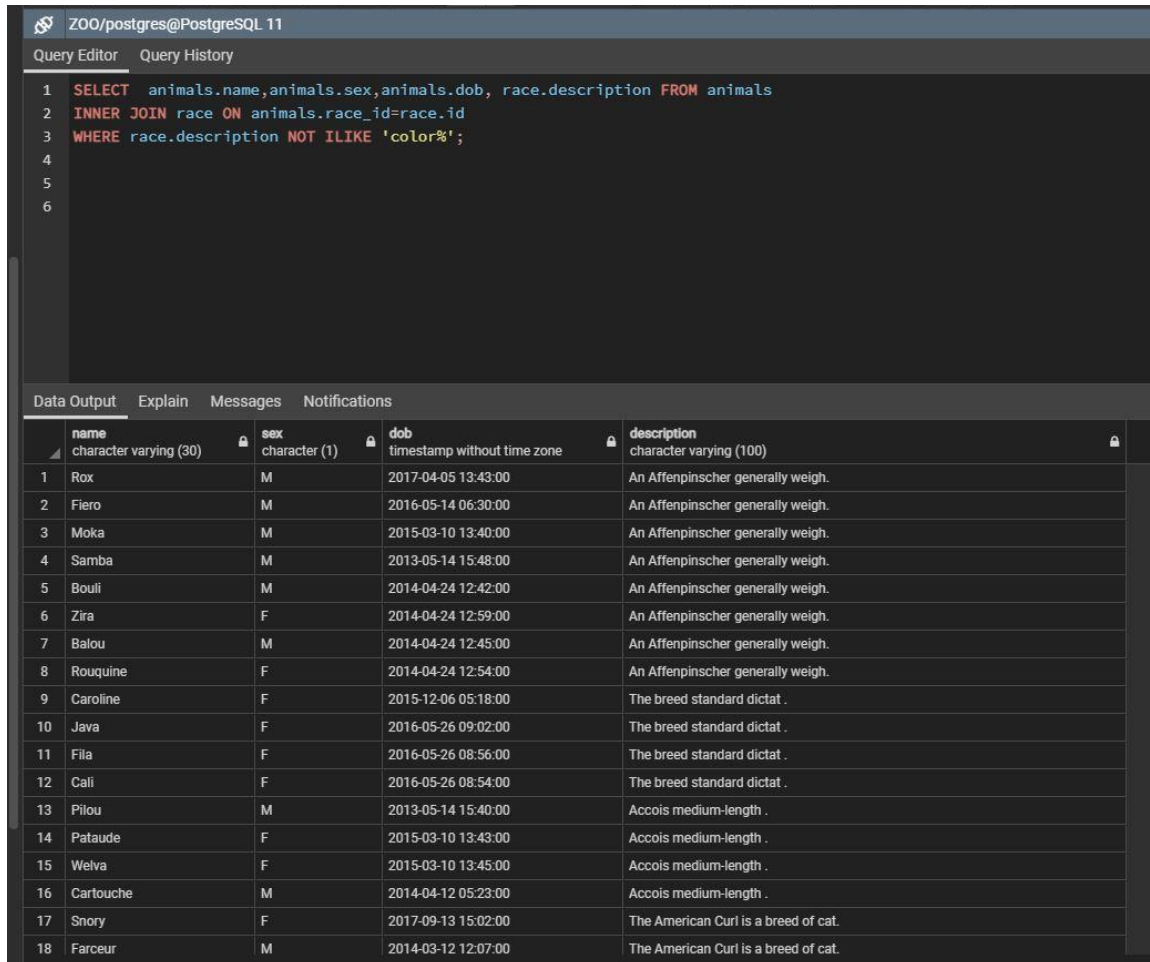
The screenshot shows a PostgreSQL query editor interface. The top bar indicates the connection is 'ZOO/postgres@PostgreSQL 11'. Below the bar are tabs for 'Query Editor' and 'Query History'. The 'Query Editor' tab contains a SQL query:

```
1 SELECT animals.id, animals.name, animals.sex, animals.comments, race.name FROM animals
2 INNER JOIN race ON animals.race_id=race.id
3 WHERE race.name='American Bully';
4
5
6
```

Below the query editor are tabs for 'Data Output', 'Explain', 'Messages', and 'Notifications'. The 'Data Output' tab is active, displaying a table with the following data:

	id integer		name character varying (30)		sex character (1)		comments text		name character varying (40)	
1	23		Cartouche		M		[null]		American Bully	
2	17		Welva		F		[null]		American Bully	
3	21		Pataude		F		[null]		American Bully	
4	27		Pilou		M		[null]		American Bully	

¢ List of all the animals (name, dob, race) who don't have the word color in their race description.



The screenshot shows a PostgreSQL query editor with a query that selects animal names, sexes, and birth dates, joined with race descriptions, excluding those containing the word 'color'.

```
1 SELECT animals.name, animals.sex, animals.dob, race.description FROM animals
2 INNER JOIN race ON animals.race_id=race.id
3 WHERE race.description NOT ILIKE 'color%';
4
5
6
```

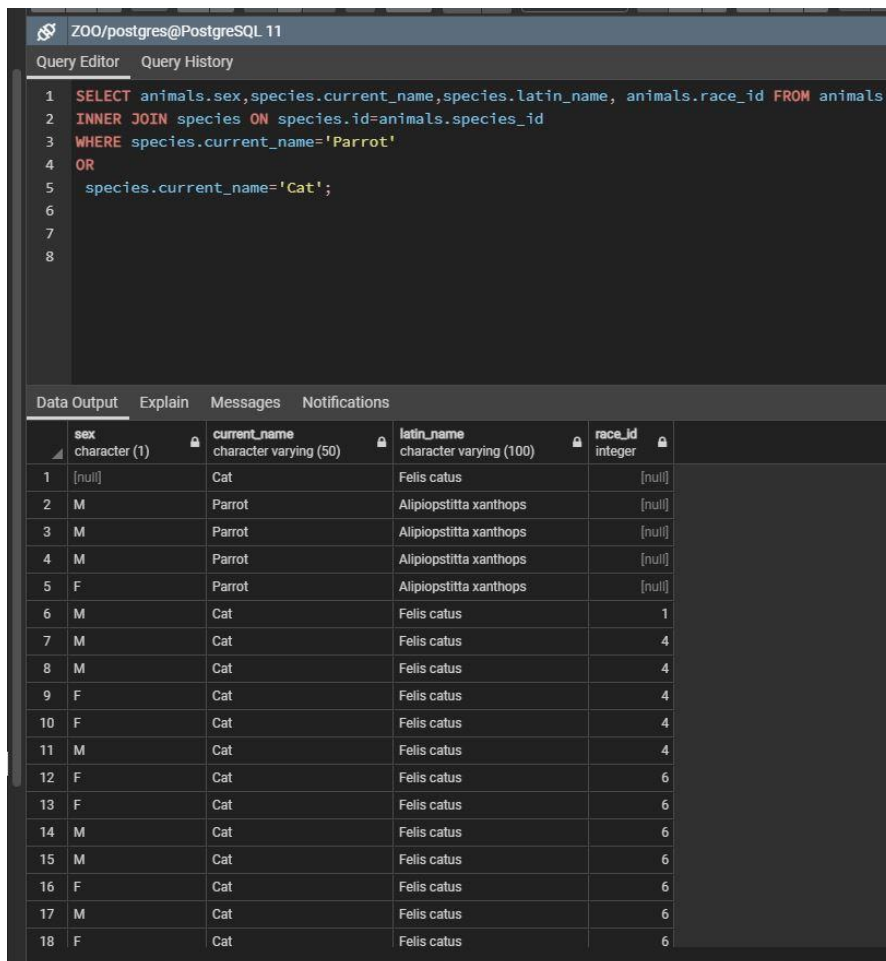
The results are displayed in a table with the following columns: name, sex, dob, and description.

	name character varying (30)	sex character (1)	dob timestamp without time zone	description character varying (100)
1	Rox	M	2017-04-05 13:43:00	An Affenpinscher generally weigh.
2	Fiero	M	2016-05-14 06:30:00	An Affenpinscher generally weigh.
3	Moka	M	2015-03-10 13:40:00	An Affenpinscher generally weigh.
4	Samba	M	2013-05-14 15:48:00	An Affenpinscher generally weigh.
5	Bouli	M	2014-04-24 12:42:00	An Affenpinscher generally weigh.
6	Zira	F	2014-04-24 12:59:00	An Affenpinscher generally weigh.
7	Balou	M	2014-04-24 12:45:00	An Affenpinscher generally weigh.
8	Rouquine	F	2014-04-24 12:54:00	An Affenpinscher generally weigh.
9	Caroline	F	2015-12-06 05:18:00	The breed standard dictat .
10	Java	F	2016-05-26 09:02:00	The breed standard dictat .
11	Fila	F	2016-05-26 08:56:00	The breed standard dictat .
12	Cali	F	2016-05-26 08:54:00	The breed standard dictat .
13	Pilou	M	2013-05-14 15:40:00	Accois medium-length .
14	Pataude	F	2015-03-10 13:43:00	Accois medium-length .
15	Welva	F	2015-03-10 13:45:00	Accois medium-length .
16	Carlouche	M	2014-04-12 05:23:00	Accois medium-length .
17	Snory	F	2017-09-13 15:02:00	The American Curl is a breed of cat.
18	Farceur	M	2014-03-12 12:07:00	The American Curl is a breed of cat.

## Lab 1: MED

¢ List all the Cats and Parrots with their sex, species, latin name and race if exist.  
Group by animal type and by race.

¢ List of the female dogs who have no race and was born before July 2012. (name, dob and race)



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

```
1 SELECT animals.sex,species.current_name,species.latin_name, animals.race_id FROM animals
2 INNER JOIN species ON species.id=animals.species_id
3 WHERE species.current_name='Parrot'
4 OR
5 species.current_name='Cat';
6
7
8
```

The results are displayed in a table with the following columns: sex, current\_name, latin\_name, and race\_id.

sex	current_name	latin_name	race_id
[null]	Cat	Felis catus	[null]
M	Parrot	Alipioptitta xanthops	[null]
M	Parrot	Alipioptitta xanthops	[null]
M	Parrot	Alipioptitta xanthops	[null]
F	Parrot	Alipioptitta xanthops	[null]
M	Cat	Felis catus	1
M	Cat	Felis catus	4
M	Cat	Felis catus	4
F	Cat	Felis catus	4
F	Cat	Felis catus	4
M	Cat	Felis catus	4
F	Cat	Felis catus	6
F	Cat	Felis catus	6
M	Cat	Felis catus	6
M	Cat	Felis catus	6
F	Cat	Felis catus	6
M	Cat	Felis catus	6
F	Cat	Felis catus	6

ZOO/postgres@PostgreSQL 11

Query Editor

Query History

1

2

3

4

5

6

7

8

9

```
SELECT species.current_name, COUNT(species.current_name) FROM animals
INNER JOIN species ON species.id=animals.species_id
WHERE species.current_name='Parrot'
OR
species.current_name='Cat'
GROUP BY species.current_name;
```

Data Output

Explain

Messages

Notifications

	current_name character varying (50)	count bigint
1	Cat	20
2	Parrot	4

ZOO/postgres@PostgreSQL 11

Query Editor

Query History

```
1 SELECT animals.race_id, COUNT(animals.race_id) FROM animals
2 INNER JOIN species ON species.id=animals.species_id
3 WHERE species.current_name='Parrot'
4 OR
5 species.current_name='Cat'
6 GROUP BY animals.race_id;
7
8
9
```

Data Output

Explain

Messages

Notifications

	race_id integer	count bigint
1	1	1
2	4	6
3	6	8
4	7	3
5	[null]	0

ZOO/postgres@PostgreSQL 11

Query EditorQuery History

1SELECT animals.race\_id, animals.name,animals.dob,animals.sex,species.current\_name FROM animals

2INNER JOIN species ON species.id=animals.species\_id

3WHERE species.current\_name='Dog'

4AND

5animals.sex='F'

6AND

7animals.race\_id IS NULL

8AND

9animals.dob < timestamp '2015-07-01 00:00:00'

10

11;

12

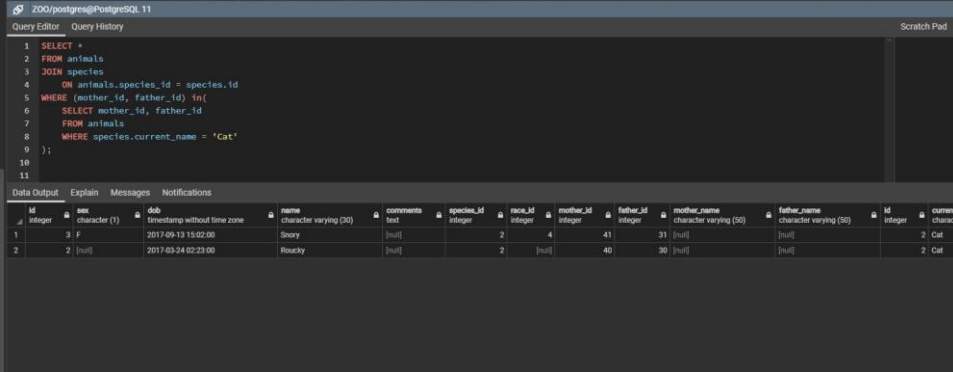
13

Data OutputExplainMessagesNotifications

	race_id integer	name character varying (30)	dob timestamp without time zone	sex character (1)	current_name character varying (50)
1	[null]	Canaille	2015-02-20 15:45:00	F	Dog
2	[null]	Anya	2015-02-20 15:47:00	F	Dog

## Lab 1: HARD

☞ List all the Cats who have parents (name and parent's name)



The screenshot shows a PostgreSQL Query Editor window with a SQL query and its results. The query is as follows:

```
1 SELECT *
2 FROM animals
3 JOIN species
4 ON animals.species_id = species.id
5 WHERE (mother_id, father_id) in(
6 SELECT mother_id, father_id
7 FROM animals
8 WHERE species.current_name = 'Cat'
9 );
10
11
```

The results are displayed in a table with the following columns: id, sex, dob, name, comments, species\_id, race\_id, mother\_id, father\_id, mother\_name, father\_name, id, current\_name. The table contains two rows of data:

id	sex	dob	name	comments	species_id	race_id	mother_id	father_id	mother_name	father_name	id	current_name
1	F	2017-09-13 15:02:00	Sherry	[null]	2	4	41	31	[null]	[null]	2	Cat
2	[null]	2017-03-24 02:23:00	Roucky	[null]	2	[null]	40	30	[null]	[null]	2	Cat

☞ List of all Bouli's kids (name, sex and dob)



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 , dob, sex FROM animals
2 WHERE father_id IN
3 (SELECT id FROM animals
4 WHERE name = 'Bouli')
```

The 'Data Output' tab is also active, showing the results of the query in a table format:

	name	dob	sex
1	Rox	2017-04-05 13:43:00	M

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 , dob, sex FROM animals
2 WHERE mother_id IN
3 (SELECT id FROM animals
4 WHERE name = 'Bouli')
```

The 'Data Output' tab is also active, showing the results of the query in a table format:

	name	dob	sex
--	------	-----	-----

¢ List of all the animals who have a father, a mother and a race. We must know the parent's race. (name, parents name, race name)