Alif Rahi
Last 4 digits: 2468

Due date: 04/11/22
CS331 / **Assignment 2**

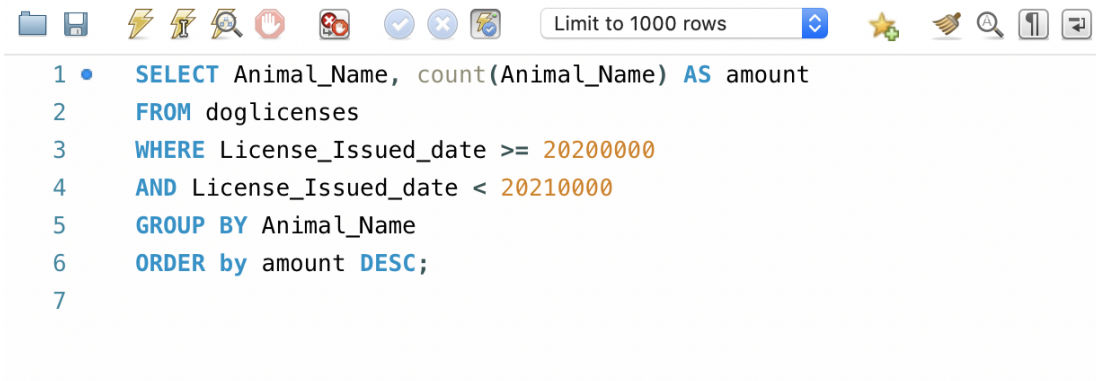
1. Create a new primary key column for the dog's table. Show the SQL to implement.

```
ALTER TABLE doglicenses ADD COLUMN Id INT PRIMARY KEY;
```

2. Populate the primary key with unique values. Show the SQL to implement.

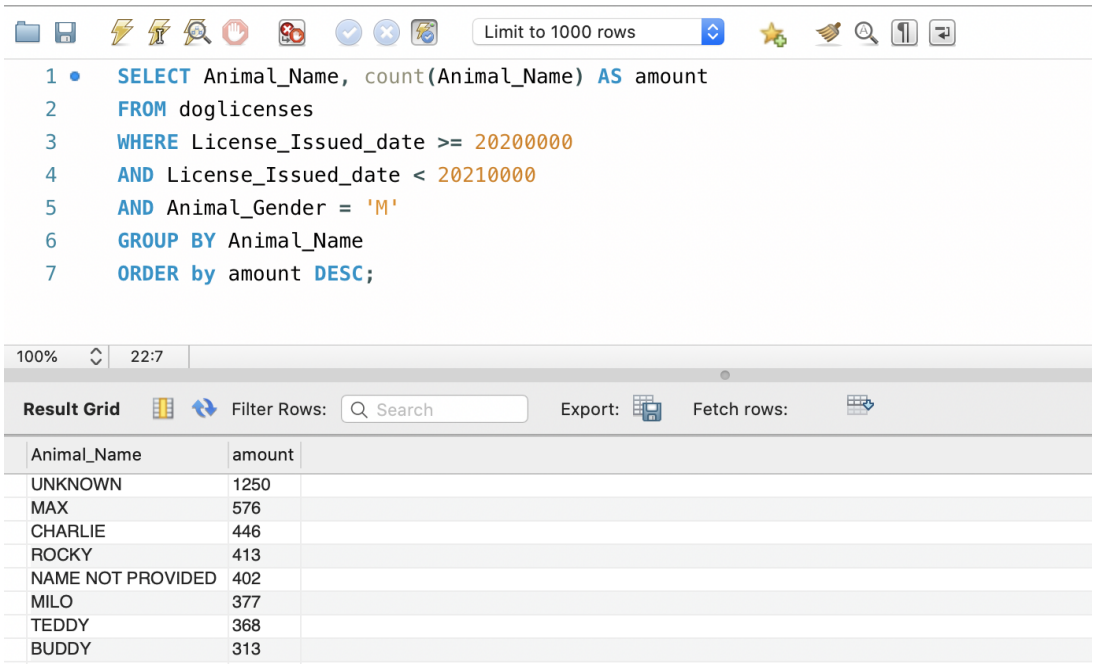
```
ALTER TABLE doglicenses MODIFY COLUMN Id INT AUTO_INCREMENT;
```

3. Identify the most popular dog names for licenses issued in 2020. Display the animal's name and number of licenses. Display the most popular dog name first.



Animal_Name	amount
UNKNOWN	2113
BELLA	709
NAME NOT PROVIDED	633
MAX	587
LUNA	580
CHARLIE	517
NAME	474
COCO	453

4. Identify the most popular male dog names for licenses issued in 2020. Display the animal's name and number of licenses. Display the most popular male dog name first.

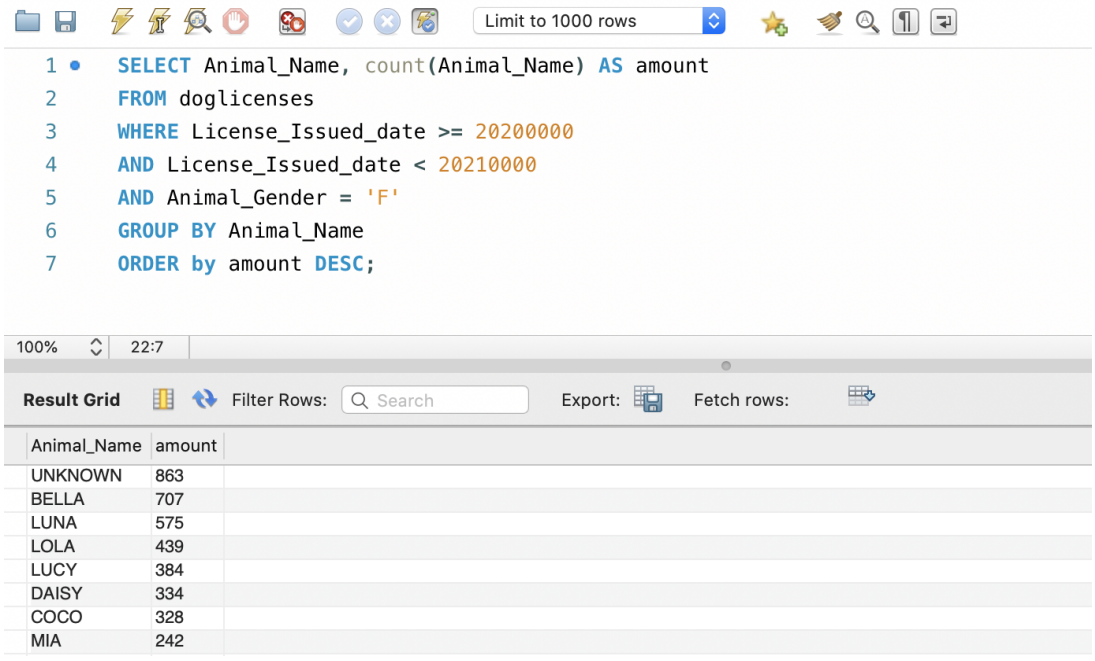


```
1  SELECT Animal_Name, count(Animal_Name) AS amount
2  FROM doglicenses
3  WHERE License_Issued_date >= 20200000
4  AND License_Issued_date < 20210000
5  AND Animal_Gender = 'M'
6  GROUP BY Animal_Name
7  ORDER by amount DESC;
```

Result Grid

Animal_Name	amount
UNKNOWN	1250
MAX	576
CHARLIE	446
ROCKY	413
NAME NOT PROVIDED	402
MILO	377
TEDDY	368
BUDDY	313

5. Identify the most popular female dog names for licenses issued in 2020. Display the animal's name and number of licenses. Display the most popular female dog name first.



```
1  SELECT Animal_Name, count(Animal_Name) AS amount
2  FROM doglicenses
3  WHERE License_Issued_date >= 20200000
4  AND License_Issued_date < 20210000
5  AND Animal_Gender = 'F'
6  GROUP BY Animal_Name
7  ORDER by amount DESC;
```

Result Grid

Animal_Name	amount
UNKNOWN	863
BELLA	707
LUNA	575
LOLA	439
LUCY	384
DAISY	334
COCO	328
MIA	242

6. Identify the number of Chihuahua by county/borough for licenses issued in 2020. Display the breed, county/borough and number of dogs.

```
1  SELECT doglicenses.breed_name, zipcodes.county, count(doglicenses.breed_name) AS amount
2  FROM zipcodes, doglicenses
3  WHERE zipcodes.zipcode = doglicenses.zipcode
4  AND doglicenses.breed_name = 'Chihuahua'
5  AND doglicenses.License_Issued_date >= 20200000
6  AND doglicenses.License_Issued_date < 20210000
7  GROUP BY zipcodes.county
8  ORDER BY amount DESC;
9
```

Result Grid

breed_name	county	amount
Chihuahua	New York	739
Chihuahua	Kings	651
Chihuahua	Queens	504
Chihuahua	Bronx	301
Chihuahua	Richmond	144
Chihuahua	Nassau	7
Chihuahua	Suffolk	1
Chihuahua	Orange	1
Chihuahua	Westchester	1

7. Identify the most popular breeds near Queens College for licenses issued in 2020. Display the breed and number of dogs. Display the most popular breed first.

```
1  SELECT breed_name, count(breed_name) AS amount
2  FROM doglicenses
3  WHERE License_issued_date >= 20200000
4  AND License_issued_date < 20210000
5  AND zipcode = '11367'
6  GROUP BY breed_name
7  ORDER BY amount DESC;
8
9
```

Result Grid

breed_name	amount
Unknown	25
Yorkshire Terrier	22
Shih Tzu	13
Chihuahua	12
Pomeranian	10
Poodle, Miniature	8
Yorkshire Terrier Crossbreed	7
Shiba Inu	6
American Pit Bull Mix / Pit Bull Mix	6

8. Identify the oldest dogs. Display the animal's name, gender, breed, zipcode, and county/borough. Display the oldest dog first.

```
1  SELECT doglicenses.Animal_name, doglicenses.Animal_gender,
2  doglicenses.breed_name, doglicenses.zipcode, zipcodes.zip_type, doglicenses.Animal_birth_Year
3  FROM doglicenses, zipcodes
4  WHERE doglicenses.zipcode = zipcodes.zipcode
5  ORDER BY doglicenses.Animal_birth_Year ASC;
```

Result Grid

Animal_name	Animal_gender	breed_name	zipcode	zip_type	Animal_birth_Year
BONNIE	F	Schnauzer, Miniature	11354	Standard	1
NINA	F	Chihuahua	11354	Standard	1
MOTEK	M	Cavalier King Charles Spaniel	10024	Standard	1
LENNY	M	Miniature Schnauzer	11205	Standard	8
BODHI	M	French Bulldog	11103	Standard	16
BODHI	M	French Bulldog	11103	Standard	16
NAME	M	Cocker Spaniel	11229	Standard	17
NAME	M	Cocker Spaniel	11229	Standard	17
SHIBA	M	Shiba Inu	10003	Standard	116

9. Identify the zipcodes with the fewest dog licenses issued in 2020. Display the zipcode, county/borough and number of dogs. Display the most popular zipcode first. Where is this zipcode? Include a picture from Google Maps. [Most popular zip codes]

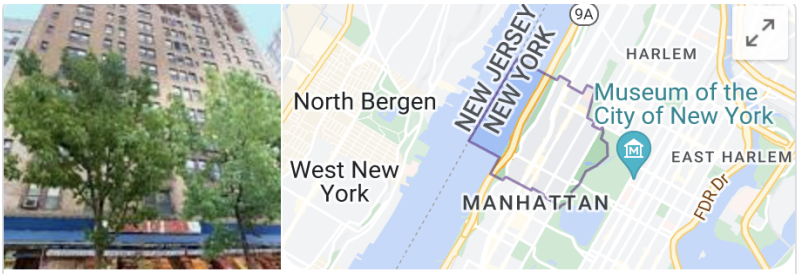
```
1  SELECT doglicenses.zipcode, zipcodes.county, count(doglicenses.license_issued_date) AS amount
2  FROM doglicenses, zipcodes
3  WHERE doglicenses.zipcode = zipcodes.zipcode
4  AND doglicenses.license_issued_date >= 20200000
5  AND doglicenses.license_issued_date < 20210000
6  GROUP BY doglicenses.zipcode
7  ORDER BY amount DESC;
8
9
```

Result Grid

zipcode	county	amount
10025	New York	1384
11215	Kings	1181
11201	Kings	1113
10023	New York	1102
10011	New York	1088
10024	New York	1065
10128	New York	1004
10314	Richmond	953

Alif Rahi
Last 4 digits: 2468

Due date: 04/11/22
CS331 / **Assignment 2**



10025

Postal code in New York City, New York

City: New York, NY

Weather: 59°F (15°C), Wind SW at 6 mph (10 km/h), 28% Humidity

weather.com

Population

Sales tax

[Fewest licenses per zip code in 2020] ⬇

Limit to 50000 rows

```
1   SELECT doglicenses.zipcode, zipcodes.county, count(doglicenses.license_issued_date) AS amount
2   FROM doglicenses, zipcodes
3   WHERE doglicenses.zipcode = zipcodes.zipcode
4   AND doglicenses.license_issued_date >= 20200000
5   AND doglicenses.license_issued_date < 20210000
6   GROUP BY doglicenses.zipcode
7   ORDER BY amount ASC;
```

100% 20:7

Result Grid Filter Rows: Search Export:

zipcode	county	amount
11793	Nassau	1
11425	Queens	1
10159	New York	1
10708	Westchester	1
11381	Queens	1
14882	Tompkins	1
14450	Monroe	1
11005	Queens	1
11743	Suffolk	1
10274	New York	1
11757	Suffolk	1
11706	Suffolk	1

10.Perform an analysis of your own choosing.

My analysis from looking at the data was that New York county (Manhattan) registered a lot of dogs in 2020. That county took up most of the top zip codes that licensed dogs in 2020. Based on how many dogs they licensed, I'm assuming that they might have the most dogs licensed in all the years from 2014-2022. Not just in 2020.

11.Display the structure of ALL tables using SQL Describe.

```
DESC doglicenses;
```

id	int	NO	PRI	NULL	auto_increment
Animal_Name	varchar(30)	YES		NULL	
Animal_Gender	varchar(4)	YES		NULL	
Animal_Birth_Year	char(4)	YES		NULL	
Breed_Name	varchar(36)	YES		NULL	
ZipCode	varchar(5)	YES	MUL	NULL	
License_Issued_Date	date	YES		NULL	
License_Expired_Date	date	YES		NULL	

```
DESC zipcodes;
```

id	int	NO	PRI	NULL	auto_increment
ZipCode	varchar(5)	YES	MUL	NULL	
city	varchar(22)	YES		NULL	
county	varchar(14)	YES		NULL	
Zip_Type	varchar(8)	YES		NULL	

12.Display the version of Oracle.

I am using version 8.0.28 of mySQL WorkBench