# **Assignment-03**

Name-Ajay Chaudhary Batch-Data engineering(batch-1)

Q. Using Select statement show details of the employees.

```
5
          empid INT PRIMARY KEY,
          name VARCHAR(100),
 6
          age INT,
          salary DECIMAL(10, 2),
 8
 9
          title VARCHAR(50)
     );
10
11
12 • INSERT INTO employee VALUES (1, 'John Doe', 30, 50000.00, 'Software Engineer');
13 • INSERT INTO employee VALUES (2, 'Jane Smith', 28, 60000.00, 'Project Manager');
14 • INSERT INTO employee VALUES (3, 'Alice Johnson', 35, 75000.00, 'Senior Developer');
15 • INSERT INTO employee VALUES (4, 'Bob Wilson', 40, 75000.00, 'Senior Developer');
16 • INSERT INTO employee VALUES (5, 'Eva Davis', 32, 50000.00, 'Software Engineer');
17
18 • select name, title from employee:
Export:
  name
           title
▶ John Doe
           Software Engineer
  Jane Smith Project Manager
  Alice Johnson Senior Developer
  Bob Wilson Senior Developer
  Eva Davis
            Software Engineer
 employee 20
```

Q.Select all columns of the employee table-

```
4 • ○ CREATE TABLE employee (
            empid INT PRIMARY KEY,
 6
            name VARCHAR(100),
  7
            age INT.
 8
            salary DECIMAL(10, 2),
  9
            title VARCHAR(50)
10
      );
11
12 • INSERT INTO employee VALUES (1, 'John Doe', 30, 50000.00, 'Software Engineer');
13 • INSERT INTO employee VALUES (2, 'Jane Smith', 28, 60000.00, 'Project Manager');
14 • INSERT INTO employee VALUES (3, 'Alice Johnson', 35, 75000.00, 'Senior Developer');
       INSERT INTO employee VALUES (4, 'Bob Wilson', 40, 75000.00, 'Senior Developer');
15 •
       INSERT INTO employee VALUES (5, 'Eva Davis', 32, 50000.00, 'Software Engineer');
17
18 •
       select name, title from employee;
19 • select * from employee;
0% $\circ$ 1:20 | 2 errors found
Result Grid ## Search
                                              Edit: 🚄 🖶 🖶 Export/Import: 📳 🐻
  empid name
                  age salary
                               title
        John Doe
                   30
                        50000.00 Software Engineer
        Jane Smith 28
                        60000.00 Project Manager
        Alice Johnson 35
                        75000.00 Senior Developer
        Bob Wilson 40
  4
                        75000.00 Senior Developer
        Eva Davis
                  32
                        50000.00 Software Engineer
  NULL NULL
                   NULL NULL
```

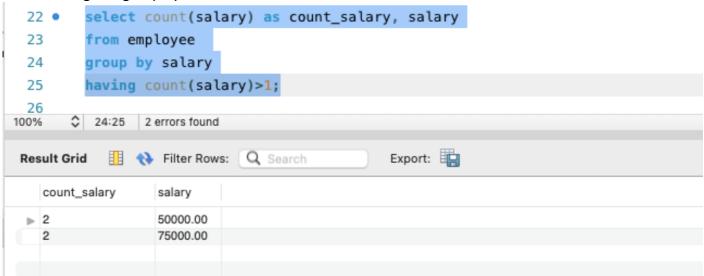
### Q.Select Distinct title from employee table-

```
12 • INSERT INTO employee VALUES (1, 'John Doe', 30, 50000.00, 'Software Engineer');
 13 • INSERT INTO employee VALUES (2, 'Jane Smith', 28, 60000.00, 'Project Manager');
 14 • INSERT INTO employee VALUES (3, 'Alice Johnson', 35, 75000.00, 'Senior Developer');
 15 • INSERT INTO employee VALUES (4, 'Bob Wilson', 40, 75000.00, 'Senior Developer');
 16 • INSERT INTO employee VALUES (5, 'Eva Davis', 32, 50000.00, 'Software Engineer');
 17
 18 • select name, title from employee;
     select * from employee;
 19 •
     select distinct title from employee;
 20 •
21
100%
    37:20 2 errors found
Export:

    Software Engineer
    ■

  Project Manager
   Senior Developer
```

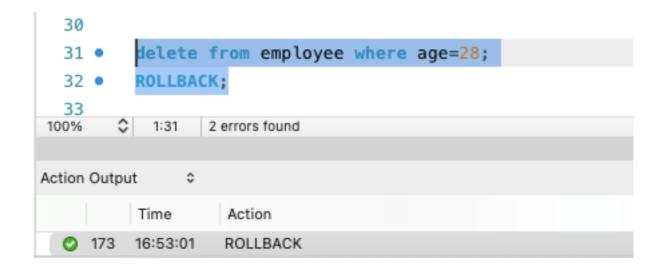
# Use of having and group by clause-



#### Transactional Control commands-

#### Commit command





# Set operators-

I made 2 table emp1 and emp2 for performing set operations.

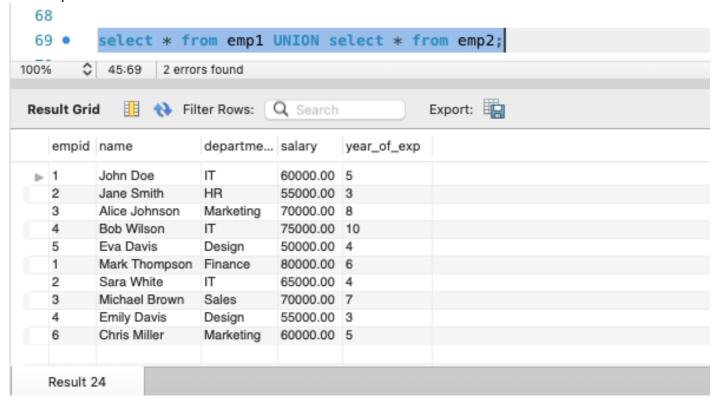
```
CREATE TABLE emp1 (
   empid INT PRIMARY KEY,
   name VARCHAR(100),
   department VARCHAR(50),
   salary DECIMAL(10, 2),
   year_of_exp INT
);

INSERT INTO emp1 VALUES (1, 'John Doe', 'IT', 60000.00, 5);
INSERT INTO emp1 VALUES (2, 'Jane Smith', 'HR', 55000.00, 3);
INSERT INTO emp1 VALUES (3, 'Alice Johnson', 'Marketing', 70000.00, 8);
INSERT INTO emp1 VALUES (4, 'Bob Wilson', 'IT', 75000.00, 10);
INSERT INTO emp1 VALUES (5, 'Eva Davis', 'Design', 50000.00, 4);
```

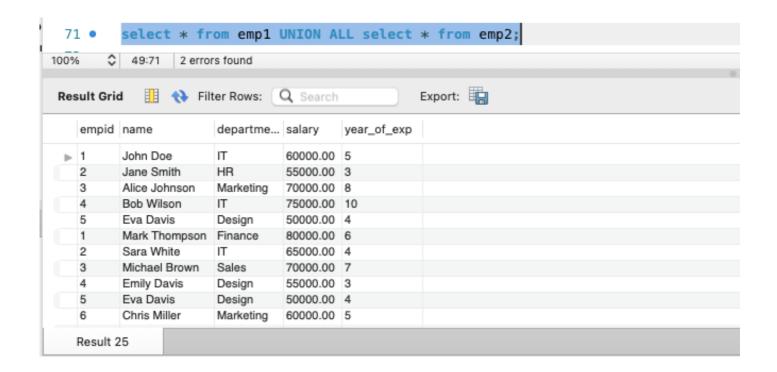
```
CREATE TABLE emp2 (
    empid INT PRIMARY KEY,
    name VARCHAR(100),
    department VARCHAR(50),
    salary DECIMAL(10, 2),
    year_of_exp INT
);

INSERT INTO emp2 VALUES (1, 'Mark Thompson', 'Finance', 80000.00, 6);
INSERT INTO emp2 VALUES (2, 'Sara White', 'IT', 65000.00, 4);
INSERT INTO emp2 VALUES (3, 'Michael Brown', 'Sales', 70000.00, 7);
INSERT INTO emp2 VALUES (4, 'Emily Davis', 'Design', 55000.00, 3);
INSERT INTO emp2 VALUES (5, 'Eva Davis', 'Design', 50000.00, 4);
INSERT INTO emp2 VALUES (6, 'Chris Miller', 'Marketing', 60000.00, 5);
```

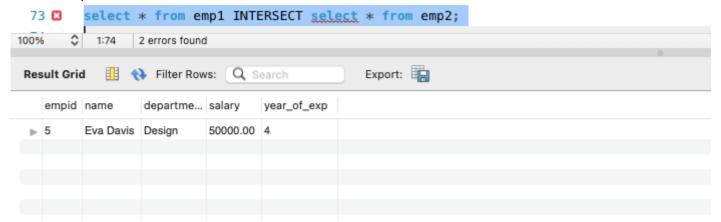
## Union operator-



Union ALL operator-



### Intersect operation-



### CREATE DATABASE pet adoption

```
1 • create database pet_adoption;
2
```

Use database pet adoption

```
5 • use pet_adoption;
6
```

Table for animals

### Create table for animals-

# Create table for adoptions-

```
17 • Create table adoptions(

18 animal_id int not null,

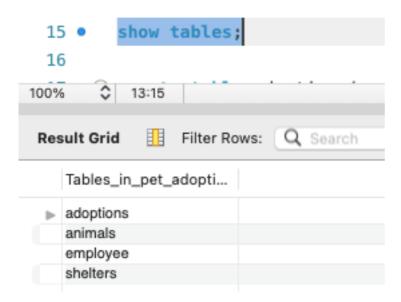
19 name varchar(250),

20 contact varchar(60),

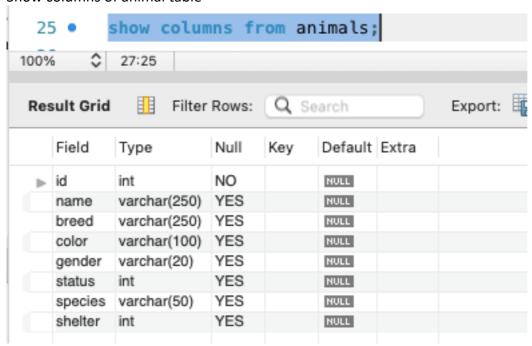
21 date date

22 );
```

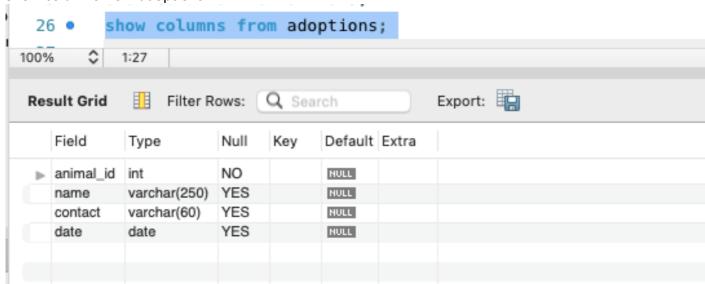
#### Show tables-



#### Show columns of animal table-



# Show columns from adoptions



Insert values into animal table-

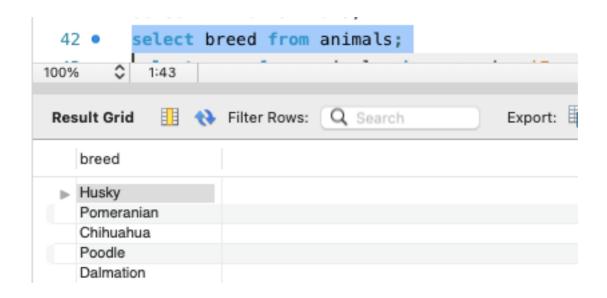
```
28 •
      insert into animals(id, name, breed, color, gender, status)
29
      values(1, 'Bellyflop', 'Beagle', 'Brown', 'Male',0);
      INSERT INTO animals (id, name, breed, color, gender, status)
30 •
      VALUES (2, 'Snowy', 'Husky', 'White', 'Female', 0);
31
      INSERT INTO animals (id, name, breed, color, gender, status)
32 •
      VALUES (3, 'Princess', 'Pomeranian', 'Black', 'Female', 0);
33
      INSERT INTO animals (id, name, breed, color, gender, status)
34 •
      VALUES (4, 'Cricket', 'Chihuahua', 'Brown', 'Male', 0);
35
      INSERT INTO animals (id, name, breed, color, gender, status)
36 •
      VALUES (5, 'Princess', 'Poodle', 'Purple', 'Female', 0);
37
      INSERT INTO animals (id, name, breed, color, gender, status)
38 •
      VALUES (6, 'Spot', 'Dalmation', 'Black and White', 'Male', 0);
39
```

Retrieve List of Dogs: SELECT \* FROM

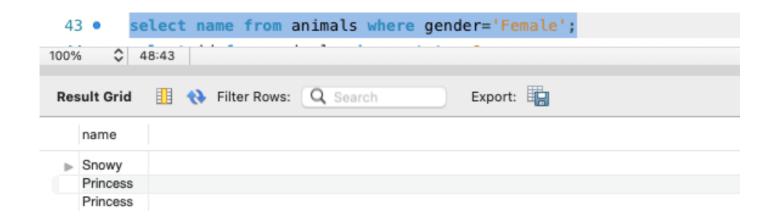
Get the full list of all properties of all dogs (defaults to a limit of 100 rows):

41 • select * from animals;								
100% 🗘 23:41								
Result Grid								
	id	name	breed	color	gender	status	species	shelter
<b></b>	2	Snowy	Husky	White	Female	0	Dog	1
	3	Princess	Pomeranian	Black	Female	0	Dog	1
	4	Cricket	Chihuahua	Brown	Male	1	Dog	1
	5	Princess	Poodle	Brown	Female	1	Dog	1
	6	Spot	Dalmation	Black and White	Male	1	Dog	1

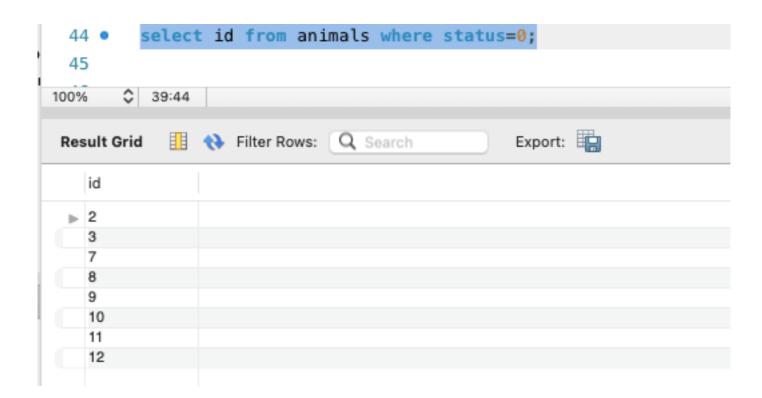
Get the breeds of all dogs:



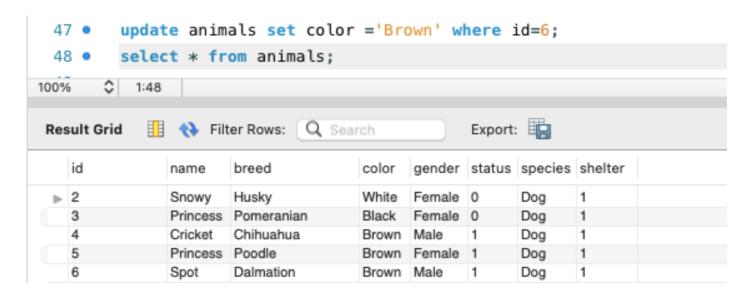
Get the names of only female dogs by including a WHERE clause:



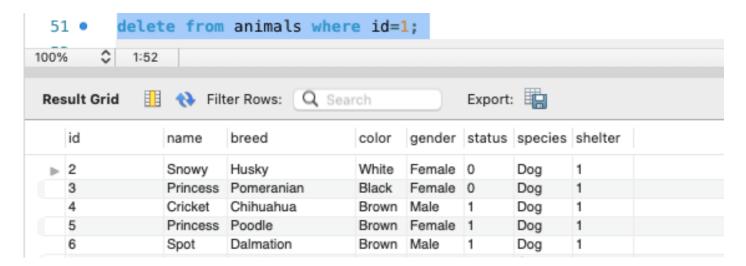
Get the IDs of dogs up for adoption:



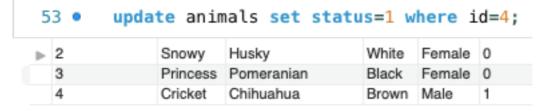
### Change the color of the dog whose id is 6



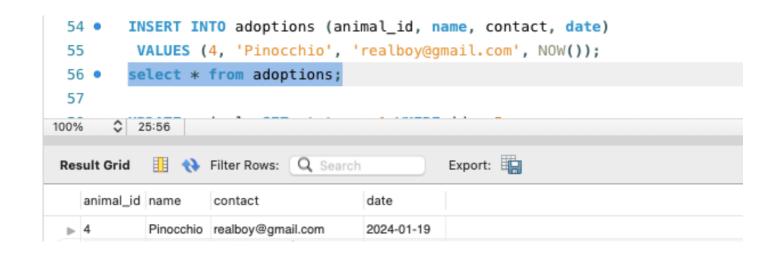
# Delete the dog whose id is 1



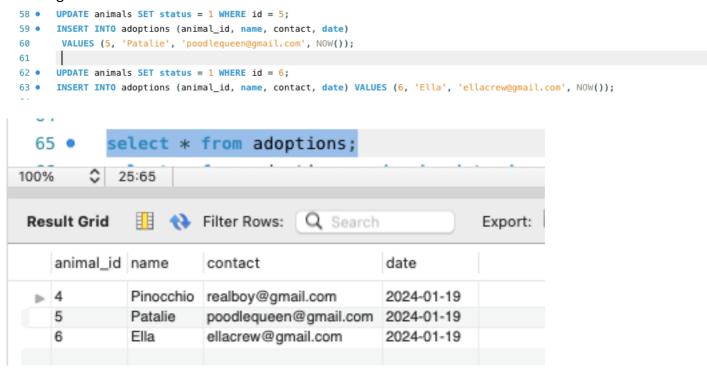
update Cricket's status to 1 for "adopted" in the animals table



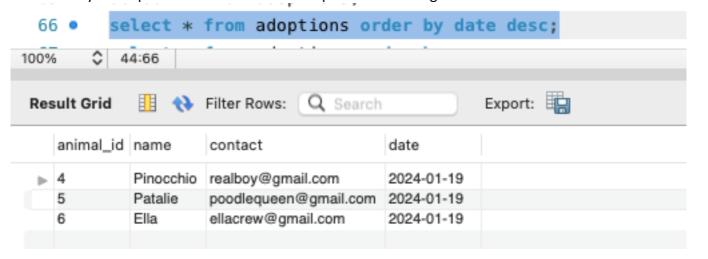
insert the event into the adoptions table

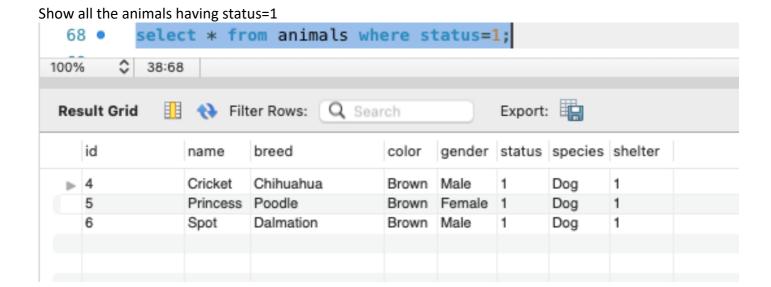


# Inserting values for id=5 and id=6

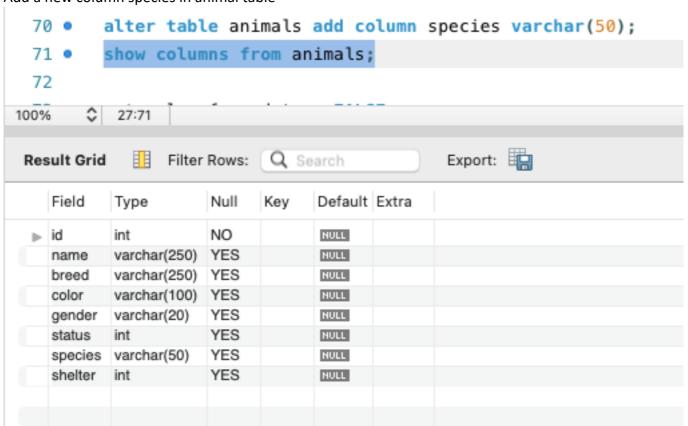


Use order by in adoptions table to show the output in descending order





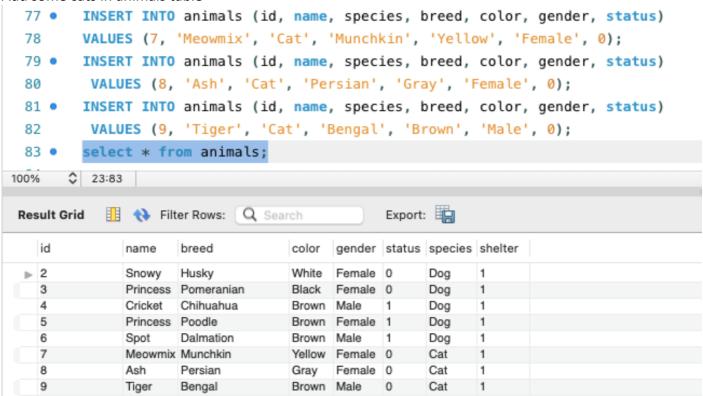
Add a new column species in animal table



Update all the current animals species to dog

```
set sql_safe_updates= FALSE;
 73 •
          update animals set species ='Dog';
 74 •
 75 •
          select * from animals;
100%
        23:75
                                                    Export:
             Filter Rows:
                                Q Search
Result Grid
    id
                        breed
                                             gender status species
                name
                                       color
    2
                Snowy
                       Husky
                                       White
                                             Female 0
                                                           Dog
    3
                Princess Pomeranian
                                       Black
                                             Female 0
                                                           Dog
    4
                Cricket
                        Chihuahua
                                             Male
                                       Brown
                                                    1
                                                           Dog
    5
                Princess Poodle
                                             Female 1
                                       Brown
                                                           Dog
    6
                        Dalmation
                                       Brown Male
                                                    1
                Spot
                                                           Dog
```

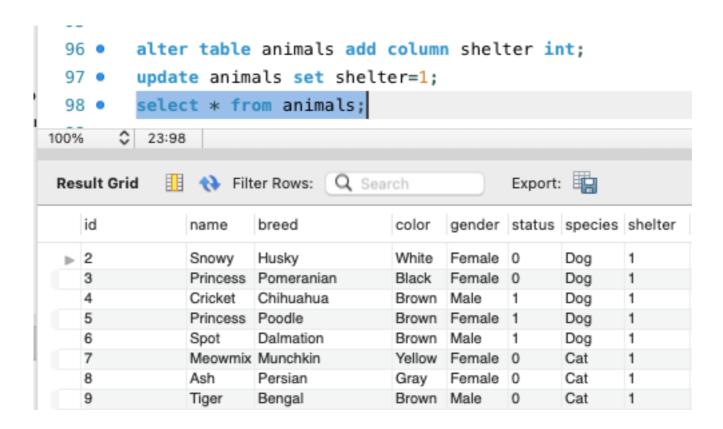
#### Add some cats in animals table



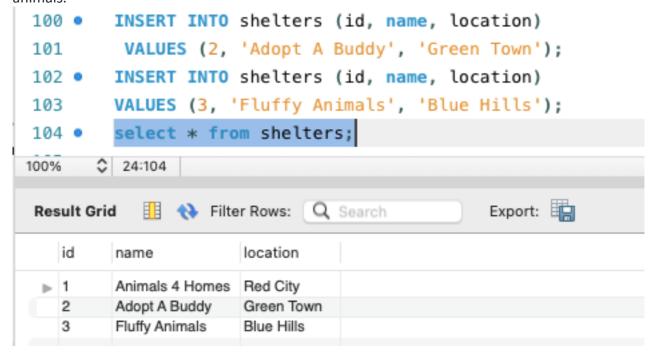
Create a table shelter and add a place with id=1

```
87 • ○ create table shelters (
 88
         id int,
 89
        name varchar(250),
         location varchar(250)
 90
 91
        );
        INSERT INTO shelters (id, name, location)
 92 •
        VALUES (1, 'Animals 4 Homes', 'Red City');
 93
         select * from shelters;
 94 •
       24:94
100%
                                               Export:
           Filter Rows:
                             Q Search
Result Grid
                      location
   id
         name
 Animals 4 Homes Red City
```

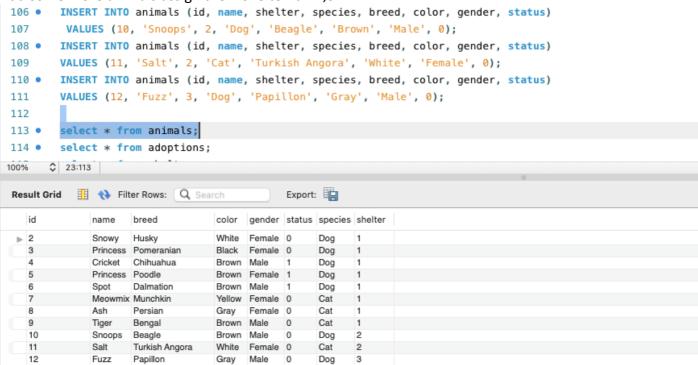
Create new shelter column and update all of the existing rows of animal data to be located in this shelter id = 1.



create entries for the other two shelters joining our efforts for pet adoption: Adopt A Buddy and Fluffy animals.



# Add some more animals assign them shelter id =2,3

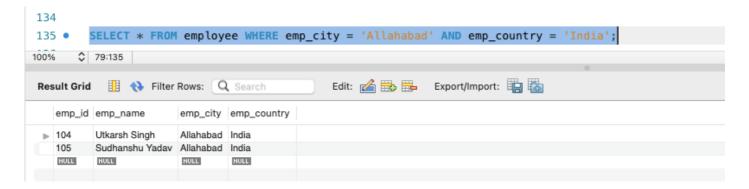


Create a table employee and add some entries to it.

```
120 • ○ CREATE TABLE employee (
121
        emp_id INT,
        emp_name VARCHAR(255),
122
        emp_city VARCHAR(255),
123
        emp_country VARCHAR(255),
124
125
        PRIMARY KEY (emp_id)
126
      );
127
128 •
        INSERT INTO employee VALUES (101, 'Utkarsh Tripathi', 'Varanasi', 'India'),
129
        (102, 'Abhinav Singh', 'Varanasi', 'India'),
        (103, 'Utkarsh Raghuvanshi', 'Varanasi', 'India'),
130
        (104, 'Utkarsh Singh', 'Allahabad', 'India'),
131
        (105, 'Sudhanshu Yadav', 'Allahabad', 'India'),
132
        (106, 'Ashutosh Kumar', 'Patna', 'India');
133
```

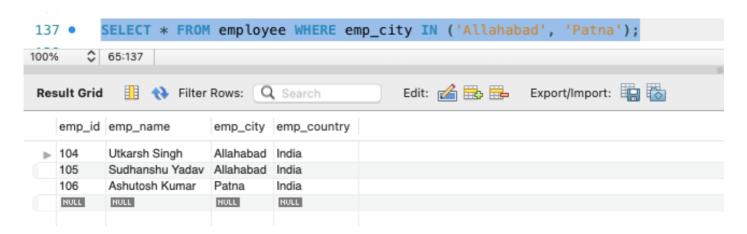
#### **AND Operator**

The AND operator is used to combines two or more conditions but if it is true when all the conditions are satisfied.

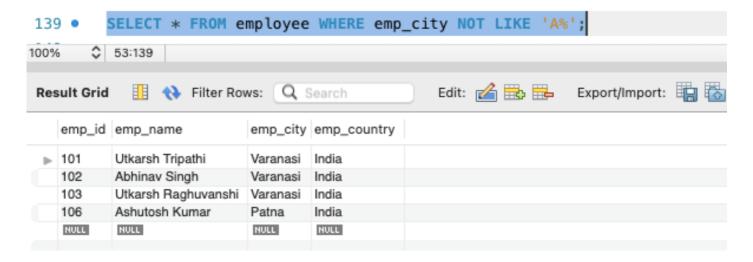


# **IN Operator**

It is used to remove the multiple OR conditions in SELECT, INSERT, UPDATE, or DELETE. and We can also use NOT IN to minimize the rows in your list and any kind of duplicate entry will be retained.

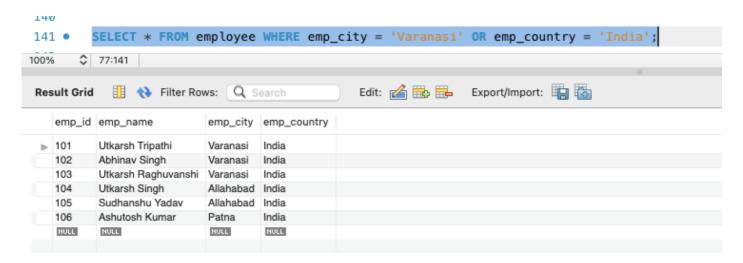


### **NOT Operator**



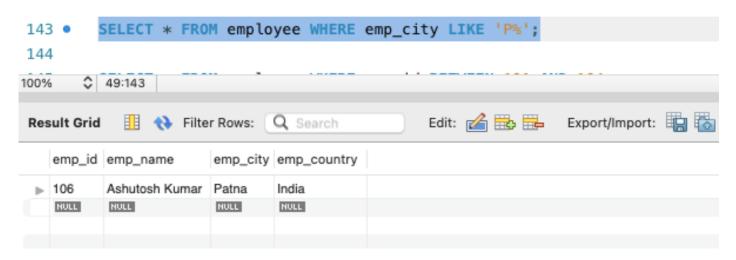
#### **OR Operator**

The OR operator is used to combines two or more conditions but if it is true when one of the conditions are satisfied.



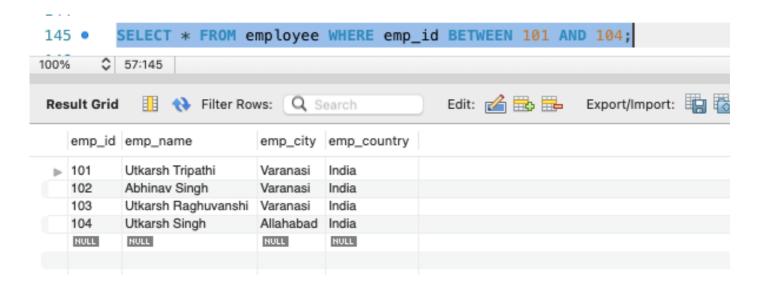
#### **LIKE Operator**

In SQL, the LIKE operator is used in the WHERE clause to search for a specified pattern in a column.



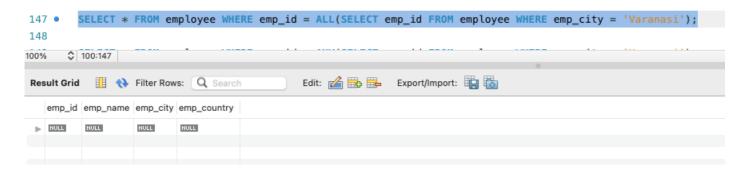
### **BETWEEN Operator**

The SQL BETWEEN condition allows you to easily test if an expression is within a range of values (inclusive).



### **ALL Operator**

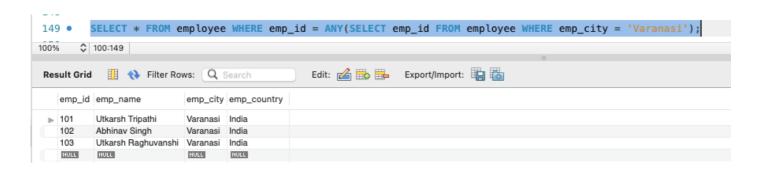
The ALL operator returns TRUE if all of the subqueries values matches the condition. **All operator** is used with SELECT, WHERE, HAVING statement.



# **ANY Operator**

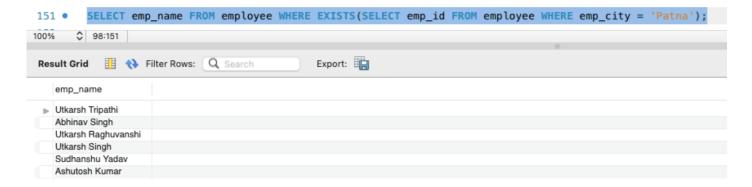
The ANY operator:

- It returns a boolean value as a result
- It returns TRUE if ANY of the subquery values match the condition



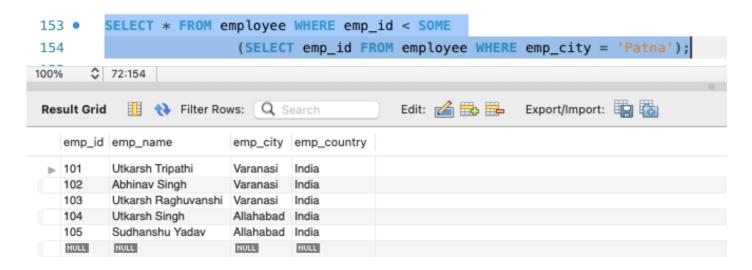
# **EXISTS Operator**

In SQL, Exists operator is used to check whether the result of a correlated nested query is empty or not. Exists operator is used with SELECT, UPDATE, INSERT or DELETE statement.



### **SOME Operator**

In SQL, SOME operators are issued with comparison operators (<,>,=,<=, etc) to compare the value with the result of a subquery.



# **SQL Distinct Clause**

The distinct keyword is used in conjunction with the select keyword. It is helpful when there is a need to avoid duplicate values present in any specific columns/table. When we use distinct keywords only the **unique values** are fetched.

