**Views:**

1. View workers and which center they work at

create view workers\_center as

select \*

from donationcenters inner join workers using (center\_id) inner join employees using (worker\_id);

2. View the locations of churches

create view church\_location as

select \*

from donationcenters inner join ziplocations using (zip\_code)

where center\_type like '%Church%';

3. View foods and their allergens

create view allergen\_foods as

select \*

from foods inner join foodallergens using (donation\_id);

4. View physical donations

create view phys\_don as

select \*

from donations inner join physicaldonations using (donation\_id);

5. View monetary donations

create view mon\_don as

select \*

from donations inner join monetarydonations using (donation\_id);

**Queries:**

1. # Find the cities with the greatest number of donation centers

select city, count(zip\_code) as num

from ziplocations inner join donationcenters using (zip\_code)

group by city

having num = (

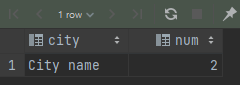
select max(y.num) as max

from (

select count(zip\_code) as num

from ziplocations inner join donationcenters using (zip\_code)

group by city) y);



2. # Find the cities with the largest number of donations

select city, count(zip\_code) as num

from ziplocations inner join donationcenters using (zip\_code) inner join donations using (center\_id)

group by city

having num = (

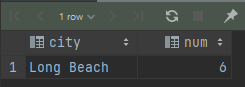
select max(y.num) as max

from (

select count(zip\_code) as num

from ziplocations inner join donationcenters using (zip\_code) inner join donations using (center\_id)

group by city) y);



3. # Find all of the pairs of employees who work at the same donation center

select a.first\_name as "Employee 1 FN",

a.last\_name as "Employee 1 LN",

b.first\_name as "Employee 2 FN",

b.last\_name as "Employee 2 LN",

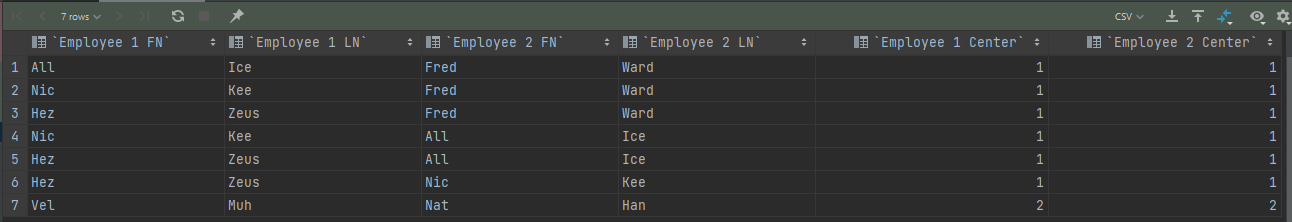
a.center\_id as "Employee 1 Center",

b.center\_id as "Employee 2 Center"

from workers\_center a inner join

workers\_center b using (center\_id)

where a.worker\_id > b.worker\_id;



4. # List the donation centers with the amount of donations above the average

select name, count(donation) as num

from donationcenters inner join donations using (center\_id)

group by center\_id

having num > (

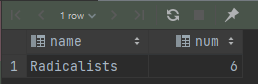
select avg(y.num) as avg

from (

select count(donation) as num

from donationcenters inner join donations using (center\_id)

group by center\_id) y);



5. # Find all of the pairs of donation centers that have a state, are in the same state, and are Churches.

select a.name as "Center Name 1",

b.name as "Center Name 2",

a.center\_type as "Center Type 1",

b.center\_type as "Center Type 2",

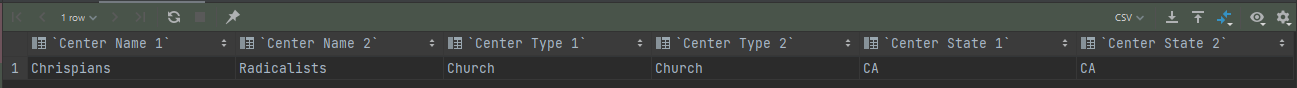
a.state as "Center State 1",

b.state as "Center State 2"

from church\_location a inner join

church\_location b using (state)

where a.center\_id > b.center\_id;



6. # Find all pairs of food with the same allergen

select a.item as "Item 1",

b.item as "Item 2",

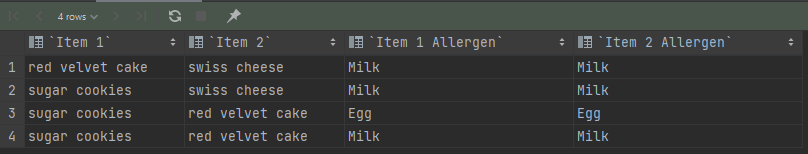
a.allergen as "Item 1 Allergen",

b.allergen as "Item 2 Allergen"

from allergen\_foods a inner join

allergen\_foods b using (allergen)

where a.donation\_id > b.donation\_id;



7. # Name the person who has donated the most amount of money

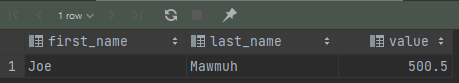
select distinct first\_name, last\_name, value

from donators inner join mon\_don using (donator\_id)

where value = (

select max(value)

from monetarydonations);



8. # Find the food with the highest number of allergens

select item as "Food", count(allergen) as "Num of Allergens"

from allergen\_foods

group by Food

having `Num of Allergens` = (

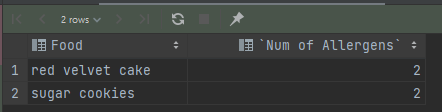
select max(y.num) as max

from (

select count(allergen) as num

from allergen\_foods

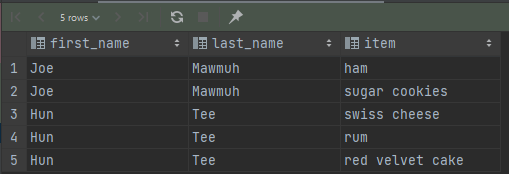
group by item) y);



9. # List the name of everyone who donated food items and what food they donated

select first\_name, last\_name, item

from donators inner join donations using (donator\_id) inner join foods using (donation\_id);



10. # List the donated items that have not yet been distributed

select donation, donation\_id

from phys\_don

where recipient\_id is null

union

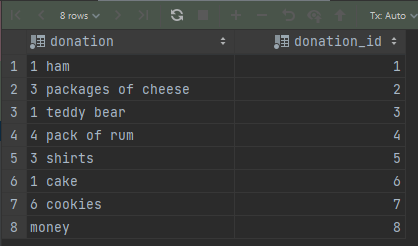
select donation, donation\_id

from mon\_don

where donation\_id not in (

select donation\_id

from moneydistributions);



**Inserts Used:**

insert into centertypes(center\_type) values

('Homeless Shelter'),

('Church');

INSERT INTO ZipLocations(zip\_code, city, state, country) VALUES

(90815, 'Long Beach', 'CA', 'United States'),

(123, 'City name', 'State', 'A country'),

(92348, 'Real Town', 'CA', 'United States');

insert into ZipLocations(zip\_code, city, country) VALUES

(43215, 'Best Ville', 'Japan'),

(54312, 'Worst Ville', 'Japan');

insert into donationcenters(name, street, center\_type, zip\_code) values

('Homelessness Help', '123 street', 'Homeless Shelter', 123),

('Needing?', '56 avenue', 'Homeless Shelter', 123),

('Radicalists', '666 blvd', 'Church', 90815),

('Chrispians', '2 blvd', 'Church', 92348),

('Baptizers', '5 blvd', 'Church', 43215),

('Missionists', '09 blvd', 'Church', 54312);

insert into workers (first\_name, last\_name, center\_id) values

('Fred', 'Ward', 1),

('All', 'Ice', 1),

('Nic', 'Kee', 1),

('Nat', 'Han', 2),

('Hez', 'Zeus', 1),

('Vel', 'Muh', 2);

insert into employees (worker\_id, hourly\_wage) values

(1, 15),

(2, 15),

(3, 15),

(4, 15),

(5, 15),

(6, 15);

insert into donators(first\_name, last\_name, phone, street, zip\_code) values

('Joe', 'Mawmuh', 0621231234, '1 street', 123),

('Hun', 'Tee', 1871234321, '5 blvd', 90815);

insert into donations(donation, date\_received, center\_id, donator\_id) values

('1 ham', '2021-1-6', 1, 1),

('3 packages of cheese', '2021-4-7', 3, 2),

('1 teddy bear', '2011-10-3', 1, 1),

('4 pack of rum', '2021-5-11', 3, 2),

('3 shirts', '2021-8-4', 3, 2),

('1 cake', '2021-5-11', 2, 2),

('6 cookies', '2021-8-4', 3, 1),

('money', '2021-9-4', 3, 1),

('money', '2021-9-7', 3, 1);

select \*

from donations;

insert into physicaldonations (donation\_id) values

(1), (2), (3), (4), (5), (6), (7);

insert into monetarydonations (value, donation\_id) values

(100.75, 8), (500.50, 9);

INSERT INTO Destinations(recipient, street, zip\_code)

VALUES('Sue\'s Orphanage', '400 State Way', 90815), ('Joey', '400 State Way', 90815);

insert into moneydistributions (value\_distributed, donation\_id, recipient\_id) values

(400, 9, 1), (100.50, 9, 2);

insert into brandeddonations (brand, donation\_id) values

('Bucher', 1), ('swiss', 2), ('teddiesRus', 3), ('Modelo', 4), ('Nike', 5), ('Homemeade', 6), ('Homemade', 7);

insert into foods (item, best\_by, donation\_id) values

('ham', '2022-1-1', 1), ('swiss cheese', '2022-1-1', 2), ('rum', '2022-1-1', 4),

('red velvet cake', '2022-1-1', 6), ('sugar cookies', '2022-1-1', 7);

insert into DonationAllegens (allergen, donation\_id) values

('Milk', 2), ('Nuts', 4), ('Milk', 6), ('Egg', 6), ('Egg', 7), ('Milk', 7);