List of SQL QUERIES

Selection and Projection queries

See total money in foodbank from donation

SELECT SUM(amount) FROM mon\_collects;

See how many protein items are in the foodbank

SELECT COUNT(category)

from item

where item.category = 'protein';

Join Query

Join the volunteers to their administrators

select Administrator.name, volunteer\_add.name

from Administrator

INNER JOIN volunteer\_add ON administrator.A\_userName= volunteer\_add.A\_userName;

Join See the donors name, date, and their item they donated.

select item\_collects.name, item\_collects.dateI, item.string

from item\_collects

INNER JOIN item ON item\_collects.did = item.did;

Division Query and relational algebra

See which administrators are connected to all the volunteers.

Only the boss0 is.

select distinct name

from administrator

minus

select name

from (

select administrator.name, volunteer\_add.A\_userName

from

administrator

cross join

volunteer\_add

minus

select name, a\_username

from administrator

) names;

--Insert tuple that first wont modify output, then one that will modify output

Aggregation query

Max amount of money donated

SELECT MAX(amount) "Maximum amount donated" FROM mon\_collects;

average amount of money donated

SELECT AVG(amount) "Average amount donated" FROM mon\_collects;

Nested aggregation with group by

Find the max average from cash or credit

SELECT MAX(amountDonated.avg)

FROM (SELECT AVG(amount) as avg, medium FROM mon\_collects group by medium)amountDonated;

Sorts the average by descending order whichever medium had higher donation

SELECT amountDonated.avg as averagedonation , amountDonated.medium as MEDIUM

FROM (SELECT AVG(amount) as avg, medium FROM mon\_collects group by medium)amountDonated

order by amountDonated.avg desc;

Finds lowest average from cash or credit

SELECT MIN(amountDonated.avg)

FROM (SELECT AVG(amount) as avg, medium FROM mon\_collects group by medium)amountDonated;

Sorts the average by ascending order whichever medium had higher donation

select amountDonated.avg as averagedonation , amountDonated.medium as MEDIUM

FROM (SELECT AVG(amount) as avg, medium FROM mon\_collects group by medium)amountDonated

order by amountDonated.avg;

deletion operation with cascade

Once the administrator deletes itself then it must cascade through

DELETE FROM administrator

WHERE A\_username = 'topboss';

It is because once the admin is deleted from the system all the associated

accounts must apply for permission from other admins.

Update Check

We are not allowed to donate a negative amount so the program checks to make sure to reject negative amount donations.