/\*1a - Find the total number of people who owned cars that were involved in accidents in 1989\*/

select count(distinct person.driver-id)

from accident, participated, person

where accident.report-number = participated.report-number

and participated.driver-id = person.driver-id

and accident.date between date '1989-01-01' and date '1989-12-31';

/\*1b - Find the number of accidents in which the cars belonging to 'John Smith' were involved.\*/

select count(distinct \*)

from accident

where exists

(select \*

from participated pa, person pe

where pa.driver-id = pe.driver-id

and pe.name = 'John Smith'

and accident.report-number = pa.report-number);

/\*1c - Add a new accident to the database; assume any values for required attributes.\*/

insert into accident

values('5109', '2020-01-23', 'Edinburg');

insert into participated

select o.driver-id, c.license, 5109, 1500

from person p, owns o, car car

where p.name = 'Arturo' and p.driver-id = o.driver-id and

o.license = c.license and c.model = 'Ford';

/\*1d - Delete the Mazda belonging to 'John Smith'. \*/

delete from car

where model = 'Mazda' and license in

(select license

from person p, owns o

where p.name = 'John Smith' and p.driver-id = o.driver-id);

/\*1e - Update the damage amount for the car with license number 'AABB2000' in the accident with report number 'AR2197' to $3000.\*/

update participated

set damage-amount = 3000

where report-number = "AR2197" and driver-id in

(select driver-id

from owns

where license = "AABB2000");

/\*2a - Find the names of all employees who work for First Bank Corporation.\*/

select employee-name

from works

where company-name = 'First Bank Corporation';

/\*2b - Find the names and cities of residence of all employees who work for First Bank Corporation.\*/

select e.employee-name, city

from works w, employee e, company c

where e.employee-name = w.employee-name and

w.company-id = c.company.id and

c.company-name = 'First Bank Corporation';

/\*2c - Find the names, street addresses, and cities of residence of all employees who work for First Bank Corporation and earn more than $10,000.\*/

select employee.employee-name, street, city

from works, employee

where employee.employee-name = works.employee-name and

company-name = 'First Bank Corporation';

/\*2d - Find all employees in the database who live in the same cities as the companies for which they work.\*/

select w.employee-name

from works w, employee e, company c

where e.employee-id = w.employee-id and e.city = c.city and

w.company-id = c.company-id;

/\*2e - Find all employees in the database who live in the same cities and on the same streets as do their managers.\*/

Select e.employee-name

From employee e, employee s, manages m

Where e.employee-name = m.employee-name

And m.manager-id = s.employee-id

And e.street = s.street and e.city = s.city;

/\*2f - Find all employees in the database who do not work for the First Bank Corporation.\*/

(select employee-name

from employee)

minus

(select employee-name

from works

where company-name = 'First Bank Corporation');

-----Update 2F-----

select employee-name

from works

where company-name <> ‘First Bank Corporation’;

/\*2g - Find all employees in the database who earn more than each employee of Small Bank Corporation.\*/

select employee-name

from works

where salary > all

(select salary

from works

where company-name = 'Small Bank Corporation');

/\*2h - Assume that the companies may be located in several cities. Find all companies located in every city in which Small Bank Corporation is located.\*/

select w.employee-name

from works w

where salary > (select max(wo.salary)

from works wo

where w.company-name = wo.company-name);

-----Update 2H-----

select c.company-name

from company c

where not exists ((select city

from company where company-name = ’Small Bank Corporation’)

except (select city

from company n

where c.company-name = n.company-name));

/\*2i - Find all employees who earn more than the average salary of all employees of their company.\*/

Select employee-name

from works w

where salary > (select avg(salary)

from works v

where w.company-name = v.company-name);

/\*2j - Find the company that has the most employees.\*/

create view staff(company-name,size)

as

select company-id,count(employee-id)

from works

group by company-name;

select company-name

from company

where company-name = (select company-name from company)

-----Update 2J-----

select company-name

from works

group by company-name

having count (distinct employee-name) >= all

(select count(distinct employee-name)

from works

group by company-name);

/\*2k - Find the company that has the smallest payroll.\*/

create view payroll(company-name, small-pay)

as

select company-name, min(salary)

from works

group by company-name;

select company-name

from payroll

where small-pay = (select min(small-pay) from payroll);

-----Update 2K-----

select company-name

from works

group by company-name

having avg(salary) <= all(select sum(salary)

from works

group by company-name);

/\*2l - Find those companies whose employees earn a higher salary, on average, than the average of First Bank Corporation.\*/

select company-name

from works

group by company-name

having avg(salary) > (select avg(salary)

from works

where company-name = ‘First Bank Corporation’);