Practice Set 4

Employee (personName, street, city)🡪 name will have at most 50 length, street and city will have 20 length.

Works (personName, companyName, yearlySalary)🡪 company name will have 50 length and salary is integer.

Company (companyName, city)

Manages (personName, managerName)

* Construct this database with at least 5 rows inserted in each table.
* Find the persons who live in the same city as their company.
  + Select personName from employee, company where employee.city=company.city;
* Find the persons who live in the same city as their managers.
  + Select personName from employee where city in (select city from employee natural join manages);
* Find the yearly payroll of each company.
  + Select companyName,sum(yearlySalary) from works group by companyName;
* Find the monthly expense of each company.
  + Select companyName,sum(yearlySalary/12) as monthlyExpense from works group by companyName;
* Find the average salaries of each company.
  + Select avg(yearlySalary) from works group by companyName;
* Find the persons with maximum salary in all the companies.
  + Select \* from works where yearlySalary=(select max(yearlySalary) from works);
* Find the persons with maximum salary in their own company.
* Select personName from works where yearlySalary in(Select max(yearlySalary) from works group by companyName) and companyName in (Select companyName,max(yearlySalary) from works group by companyName) ;
* Select yearlySalary from works group by companyName having yearlySalary = max(yearlySalary);
* Find the persons who earns most in his city.
  + Select personName from employee where city in (Select city, max(yearlySalary) from employee natural join works group by city);
* Find the total number of working persons.
  + Select count(personName) from Works;
* Find the total number of working persons in each city.
  + Select city,count(personName) from works natural join employee group by city;
* Find the company with the maximum number of employees.
  + select companyName from works group by companyName having count(personName)=(select max(count(personName)) from works group by companyName);
* List the managers of each company.
  + Select managerName, companyName from employee natural join manages natural join works;
* Find the monthly salaries of the managers along with their name and company name.
  + Select managerName,companyName, yearlySalary/12 as monthlySalary from employee natural join manages natural join works;
* Find the total amount of money each company pays to their managers.
  + Select companyName, sum(yearlySalary) from manages natural join works group by companyName;