

```
# drop table
```

```
# DROP TABLE employee;
```

```
# DROP TABLE works ;
```

```
# DROP TABLE company;
```

```
# DROP TABLE manages ;
```

```
CREATE TABLE `employee` (
```

```
    `id` bigint NOT NULL AUTO_INCREMENT PRIMARY KEY,
```

```
    `employee-name` VARCHAR(50),
```

```
    `street` VARCHAR(50),
```

```
    `city` VARCHAR(50)
```

```
);
```

```
insert into employee (`employee-name`, street, city) values ('gcanbyn', '55400 Hermina Lane', 'Tororo');
```

```
insert into employee (`employee-name`, street, city) values ('Isandiford1', '2200 Kings Road', 'Gunjur Kuta');
```

```
insert into employee (`employee-name`, street, city) values ('mmursell2', '04 Brickson Park Circle', 'Rasskazovo');
```

```
insert into employee (`employee-name`, street, city) values ('kmcvee3', '49193 Miller Plaza', 'Podkumskiy');
```

```
insert into employee (`employee-name`, street, city) values ('pmaso1', '1 Sugar Way', 'Stockholm');
```

```
insert into employee (`employee-name`, street, city) values ('pmellows5', '29541 Hansons Center', 'Leitões');
```

```
insert into employee (`employee-name`, street, city) values ('criccardelli5', '29541 Hansons Center', 'Leitões');
```

```
insert into employee (`employee-name`, street, city) values ('Obadias', '29541 Hansons Center', 'Leitões');
```

```
insert into employee (`employee-name`, street, city) values ('Axel', '29541 Hansons Center', 'Leitões');
```

```
insert into employee (`employee-name`, street, city) values ('Foster', 'Hansons Center', 'Lei');
```

```
insert into employee (`employee-name`, street, city) values ('Doretta', 'Hansons Center', 'Lei');
```

```
insert into employee (`employee-name`, street, city) values ('criccarde', '29541 Center', 'tões');
```

```
# see employee table
```

```
SELECT * FROM employee;
```

```
# work table
```

```
CREATE TABLE `works` (  
    `id` bigint NOT NULL AUTO_INCREMENT PRIMARY KEY,  
    `employee-name` VARCHAR(50),  
    `company-name` VARCHAR(50),  
    `salary` INT  
);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('gcanbyn', 'Lakin, Turcotte and Ortiz', 664);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('lsandiford1', 'janata bank', 10700);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('mmursell2', 'Kozey-Rolfson', 592);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('kmcvee3', 'Cormier, Nikolaus and Welch', 218000);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('pmaso1', 'Brakus, Okuneva and Collins', 956);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('pmellows5', 'janata bank', 592000);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('criccardelli5', 'First Bank Corporation', 737);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('raakaa', 'Sonali Bank', 737);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('sk', 'First Bank Corporation', 737);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('ahmed', 'Sonali Bank', 7007);
```

```
insert into works (`employee-name`, `company-name`, `salary`) values ('drubo', 'First Bank', 737);
```

see work table

```
SELECT * FROM works ;
```

company table

```
create table company (
```

```
    `company-name` VARCHAR(50),
```

```
    city VARCHAR(50)
```

```
);
```

```
insert into company (`company-name`, city) values ('Lakin, Turcotte and Ortiz', 'Tororo');
```

```
insert into company (`company-name`, city) values ('Kozey-Rolfson', 'Rasskazovo');
```

```
insert into company (`company-name`, city) values ('Torp Inc', 'Maishi');
```

```
insert into company (`company-name`, city) values ('Cormier, Nikolaus and Welch', 'Bodzentyń');
```

```
insert into company (`company-name`, city) values ('Brakus, Okuneva and Collins', 'Stockholm');
```

```
insert into company (`company-name`, city) values ('Janata bank', 'Boissevain');
```

```
insert into company (`company-name`, city) values ('Leannon, Gulgowski and Greenfelder', 'Uyugan');
```

```
insert into company (`company-name`, city) values ('Connelly Group', 'Winseler');
```

```
insert into company (`company-name`, city) values ('Sonal Bank', 'dhaka');
```

```
insert into company (`company-name`, city) values ('Sonal Bank', 'khulna');
```

```
insert into company (`company-name`, city) values ('brain station', 'khulna');
```

```
insert into company (`company-name`, city) values ('infosys', 'dhaka');
```

```
insert into company (`company-name`, city) values ('wipro', 'dhaka');
```

see company table

```
SELECT * FROM company;
```

manager table

```
create table manages (
```

```

        `employee-name` VARCHAR(50),
        `manager-name` VARCHAR(50)
    );

insert into manages (`employee-name`, `manager-name`) values ('Obadiah', 'Axel');
insert into manages (`employee-name`, `manager-name`) values ('Rosemarie', 'Norbert');
insert into manages (`employee-name`, `manager-name`) values ('Foster', 'Doretta');
insert into manages (`employee-name`, `manager-name`) values ('Myrna', 'Jillane');
insert into manages (`employee-name`, `manager-name`) values ('Justis', 'Fidelio');

```

a) Find the names, street address, and cities of residence for all employees who work for 'Janata Bank' and earn more than TK 10,000.

a) Ans

```

SELECT employee.`employee-name`,employee.street,employee.city FROM employee,works WHERE
employee.`employee-name` = works.`employee-name` AND works.`company-name`='janata bank' AND
works.salary > 10000 ;

```

b) Find the names of all employees in the database who live in the same cities as the companies for which they work.

b) ans

```

SELECT employee.`employee-name` from employee ,works,company WHERE employee.`employee-
name`=works.`employee-name` and employee.city=company.city and works.`company-
name`=company.`company-name` ;

```

c) Find the names of all employees in the database who live in the same cities and on the same streets as do their managers.

c) ans

```

SELECT e1.`employee-name` from employee e1, employee e2, manages m WHERE e1.`employee-
name`=m.`employee-name` and m.`manager-name`=e2.`employee-name` and e1.street = e2.street AND
e1.city=e2.city ;

```

d) Find the names of all employees in the database who do not work for 'First Bank Corporation'. Assume that all people work for exactly one company.

d) ans

```
SELECT `employee-name` from works where `company-name` <> 'First Bank Corporation' ;
```

e) Find the names of all employees in the database who earn more than every employee of 'Sonali Bank'. Assume that all people work for at most one company.

e) ans

```
SELECT `employee-name` from works WHERE salary > all(SELECT salary FROM works where `company-name` ='Sonali Bank') ;
```

f) Assume that the companies may be located in several cities. Find all companies located in every city in which 'Sonali Bank' is located.

f) ans

```
# SELECT C.`company-name` FROM company C where NOT EXISTS ((SELECT city from company where `company-name`='Sonali Bank') EXCEPT ( select city from company C2 where C.`company-name` = C2.`company-name` ) ) ;
```

```
# SELECT C.`company-name` FROM company C where NOT EXISTS ((SELECT city from company where `company-name`='Sonali Bank') not in ( select city from company C2 where C.`company-name` = C2.`company-name` ) ) ;
```

```
# SELECT C.`company-name` FROM company C where (SELECT city from company where `company-name`='Sonali Bank') contains ( select city from company C2 where C.`company-name` = C2.`company-name` ) ;
```

g) Find the names of all employees who earn more than the average salary of all employees of their company. Assume that all people work for at most one company.

g) ans

```
SELECT `employee-name` from works W WHERE salary >(select avg(salary) from works W2 where W.`company-name`=W2.`company-name`);
```

h) Find the name of the company that has the smallest payroll.

h) ans

```
SELECT `company-name` from works group by `company-name` having sum(salary) <= all (select  
sum(salary) from works group by `company-name`);
```