

```

-- step 1: create the database

create database emp1;

use emp1;

-- step 2: create the tables

-- 1. employee table
create table emp (
    ename varchar(50) primary key,
    street varchar(100),
    city varchar(50)
);

-- 2. company table
create table comp (
    compname varchar(50) primary key,
    city varchar(50)
);

-- 3. works table
-- this table contains the salary and employee-company relationships
create table works (
    ename varchar(50),
    compname varchar(50),
    salary int,
    primary key(ename, compname),
    foreign key(ename) references emp(ename),
    foreign key(compname) references comp(compname)
);

-- 4. manages table
-- this table maps employees to their managers
create table manages (
    ename varchar(50),
    manager_name varchar(50),
    primary key(ename, manager_name),
    foreign key(ename) references emp(ename),
    foreign key(manager_name) references emp(ename)
);

-- step 3: insert data into the tables

-- 1. insert data into the `emp` (employee) table
insert into emp (ename, street, city) values
('Rahul', 'MG Road', 'Pune'),
('Amit', 'Shivaji Nagar', 'Mumbai'),
('Snehal', 'Kalyani Nagar', 'Pune'),
('Nikita', 'Fergusson College Road', 'Pune'),
('Suresh', 'Andheri West', 'Mumbai');

-- 2. insert data into the `comp` (company) table
insert into comp (compname, city) values
('First Bank Corporation', 'Mumbai'),
('Tech Solutions', 'Pune'),
('Maharashtra Pvt Ltd', 'Nagpur');

-- 3. insert data into the `works` (works) table

```

```

insert into works (ename, compname, salary) values
('Rahul', 'First Bank Corporation', 12000),
('Amit', 'Tech Solutions', 15000),
('Snehal', 'First Bank Corporation', 18000),
('Nikita', 'Maharashtra Pvt Ltd', 9500),
('Suresh', 'Tech Solutions', 11000);

-- 4. insert data into the `manages` (manages) table
insert into manages (ename, manager_name) values
('Rahul', 'Amit'),
('Snehal', 'Amit'),
('Nikita', 'Rahul'),
('Suresh', 'Nikita');

-- step 4: run the queries

-- 1. find the names of all employees who work for 'First Bank Corporation'
select ename
from works
where compname = 'First Bank Corporation';

-- 2. find all employees who do not work for 'First Bank Corporation'
select ename
from works
where compname != 'First Bank Corporation';

-- 3. find the company that has the most employees
select compname
from works
group by compname
order by count(ename) desc
limit 1;

-- 4. find all companies located in every city where Small Bank Corporation is
located
select c.compname
from comp c
where not exists (
    select 1
    from comp c2
    where c2.compname = 'Small Bank Corporation'
    and c2.city not in (select city from comp where compname = c.compname)
);

-- 5. find details of employees having a salary greater than 10,000
select e.ename, e.street, e.city, w.compname, w.salary
from emp e
join works w on e.ename = w.ename
where w.salary > 10000;

-- 6. update salary of all employees who work for 'First Bank Corporation' by 10%
update works
set salary = salary * 1.10
where compname = 'First Bank Corporation';

-- 7. find employee and their managers
select w.ename, m.manager_name
from manages m
join works w on m.ename = w.ename;

```

```
-- 8. find the names, street, and cities of employees who work for 'First Bank Corporation' and earn more than 10,000
select e.ename, e.street, e.city
from emp e
join works w on e.ename = w.ename
where w.compname = 'First Bank Corporation'
      and w.salary > 10000;
```

```
-- 9. find companies where employees earn a higher salary, on average, than the average salary at 'First Bank Corporation'
select compname
from works
group by compname
having avg(salary) > (
    select avg(salary)
    from works
    where compname = 'First Bank Corporation'
);
```