

## 4.7

```
create table employee
( employee_name char(20),
  street char(20),
  city char(20),
  primary key( employee_name) )
```

```
create table works
( employee_name char(20),
  company_name char(20),
  salary int
  primary key( employee_name),
  foreign key( company_name) references company,
  foreign key( employee_name) references employee )
```

```
create table company
( company_name char(20),
  city char(20),
  primary key( company_name) )
```

```
create table managers
( employee_name char(20),
  manager_name char(20),
  primary key( employee_name),
  foreign key( employee_name) references employee )
```

## 4.9

所有级别的经理的所有员工的元组也会被删除!这是通过一系列步骤进行的。最初的删除将触发删除经理直接员工对应的所有元组。这些删除会反过来导致第二级员工元组的删除，以此类推，直到所有直接和间接的员工元组都被删除。

## 4.16

a.

```
create table expression for address
foreign key(name) references salaried_worker or hourly_worker
```

b.

每当一个元素被插入到 address 中时，必须先在 salaried\_worker 中查找他的名字，找不到则在 hourly\_worker 中查找；

## 5.8

```
create trigger check-delete-trigger after on account
referencing old row as orow
for each row
delete from depositor
where depositor.customer_name not in( select customer_name
                                     from depositor
                                     where account_number <> orow.account_number )
end
```

## 5.21

```
create trigger on-delete-cascade after delete on s
referencing old as orow
for each row
delete from r
where r.b=orow.a
end
```