

```
create table Patient (  
    number integer,  
    name varchar(255),  
    address varchar(255),  
    primary key (number));
```

```
create table PAN (  
    domain varchar(255),  
    phone integer,  
    primary key (domain),
```

```
create table Device (  
    serialnum integer,  
    manufacturer varchar(255),  
    description varchar(255),  
    primary key (serialnum, manufacturer));
```

```
create table Sensor (  
    snum integer,  
    manuf varchar(255),  
    units varchar(255),  
    primary key (num, manuf),  
    foreign key (num) references Device (serialnum),  
    foreign key (manuf) references Device (manufacturer));
```

```
create table Actuator (  
    num integer,  
    manuf varchar(255),  
    units varchar(255),  
    primary key (num, manuf),  
    foreign key (num) references Device (serialnum),  
    foreign key (manuf) references Device (manufacturer));
```

create table Manufacturer (

id integer,

name varchar(255),

primary key (id));

create table Period (

start date,

end date,

primary key (start, end));

create table Reading (

sensor integer,

manuf varchar(255),

datetime timestamp,

value numeric(20, 2),

primary key (sensor, manuf)

foreign key (sensor) references sensor (sensor),

foreign key (manuf) references sensor (manuf));

create table Setting (

sensor integer,

manuf varchar(255),

datetime timestamp,

value numeric(20, 2)

primary key (sensor, manuf)

foreign key (sensor) references Actuator (sensor),

foreign key (manuf) references Actuator (manuf));

create table users (

start timestamp,

end timestamp,

patient integer,

pan varchar(255),

primary Key (start, end, patient),

foreign Key (start) references Period (start),

foreign Key (end) references Period (end),

foreign Key (patient) references Patient (number),

foreign Key (pan) references PAN (domain));

create table lives (

start timestamp,

end timestamp,

patient integer,

muni integer,

primary Key (start, end, patient),

foreign Key (start) references Period (start),

foreign Key (end) references Period (end),

foreign Key (patient) references Patient (number),

foreign Key (muni) references Municipality (muni4code));

create table connects (

start timestamp,

end timestamp,

num integer,

manuf varchar(255),

pan varchar(255),

primary Key (start, end, num, manuf)

foreign Key (start) references Period (start),

foreign Key (end) references Period (end),

foreign Key (num) references Device (serial num),

foreign Key (manuf) references Device (manufacturer),

foreign Key (pan) references PAN (domain));