

Appendix to the Third Term Test Fall 2003

November 5th 2003

```
create table continent (  
    name char(32) not null,  
    area real,  
    constraint continent_pk primary key (name)  
);
```

```
create table country (  
    name varchar(64) not null,  
    continent char(32),  
    population integer default 0,  
    constraint country_pk primary key (name),  
    constraint country_fk foreign key (continent)  
        references continent  
);
```

```
create table province (  
    name varchar(64) not null,  
    country varchar(64) not null,  
    capital varchar(64),  
    population integer default 0,  
    constraint province_pk primary key (name, country),  
    constraint province_fk foreign key (country) references country  
);
```

```
create table city(  
    name varchar(64) not null,  
    country varchar(64) not null,  
    province varchar(64),  
    constraint city_pk primary key (name, province, country),  
);
```

Information on the database

```
>db2 "select count(*) as Number_Of_Continent from Continent"
```

```
NUMBER_OF_CONTINENT  
-----  
                    5
```

1 record(s) selected.

```
>db2 "select count(*) as Number_Of_Country from Country"
```

```
NUMBER_OF_COUNTRY  
-----  
                234
```

1 record(s) selected.

```
>db2 "select count(*) as Number_Of_Province from Province"
```

```
NUMBER_OF_PROVINCE  
-----  
                1449
```

1 record(s) selected.

```
>db2 "select count(*) as Number_Of_City from City"
```

```
NUMBER_OF_CITY  
-----  
                3128
```

1 record(s) selected.

From the 234 countries in the database only 64 have at least one province.

Also from the 3,128 cities in the database 524 do not have a value for the province attribute.