Worksheet 7 - editing tables

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Your Name: _____

Names of people you worked with: _____

- Do you remember everyone's name? On which social media platform/website/TV series do you waste too much of your time?
- What are your plans for the summer? Have you started working toward figuring them out?

Consider the following fictional tables which exist in a fictional hospital database.[1]

donor

dName	age	bloodType
Alice	53	A+
Peter	34	AB+
Bob	44	AB-
Gert	23	A-

doctor

docName	insurance	rate
Wilhelm	HMO	15,000
Wilhelm	PPO	20,000
Heinz	HMO	12,000
Pferd	PPO	14,000

organ

donor	organ	available
Alice	Heart	2014
Bob	Lung	2015
Bob	Bladder	2015
Peter	Foot	2011
Gert	Lung	2014

patient

pName	insurance	age	bloodType
Hilde	HMO	13	A-
Fritz	PPO	87	AB+

takeCare

patient	organ	doctor
Hilde	Lung	Wilhelm
Fritz	Heart	Wilhelm

- Variables with black background are the primary keys of a table.
- The variable `donor` of table `organ` is a foreign key to table `donor`.
- The variable `patient` of table `takeCare` is a foreign key to table `patient`.

[1] Example taken from http://cs.iit.edu/~cs425/previous/14fall/

- The variable `doctor` of table `takeCare` stores doctors. However, it is not a foreign key to table doctor, because the primary key of that table also includes insurance information.

Task:

Write **SQL** code to accomplish the following tasks (one **SQL** operation for each of the four tasks).

1. Delete all organs that were available before 2014.
2. Increase the rate of all doctors for HMO insurances by 1,000.
3. Insert a new `organ` 'Liver' for `donor` 'Alice' available in '2016'.
4. Update the availability of all hearts to 2016 if their current availability is 2015.

Solution:

1. Delete all organs that were available before 2014.

```
DELETE FROM organ
    WHERE available < 2014;
```

2. Increase the rate of all doctors for HMO insurances by 1,000.

```
UPDATE doctor
    SET rate = rate + 1000
    WHERE insurance = 'HMO'
```

3. Insert a new `organ` 'Liver' for `donor` 'Alice' available in '2016'.

```
INSERT INTO organ VALUES ( 'Alice', 'Liver' , 2014);
```

4. Update the availability of all hearts to 2016 if their current availability is 2015.

```
UPDATE organ
    SET available = 2016
    WHERE organ = 'Heart' AND available = 2015;
```