CSC 370 Assignment 1

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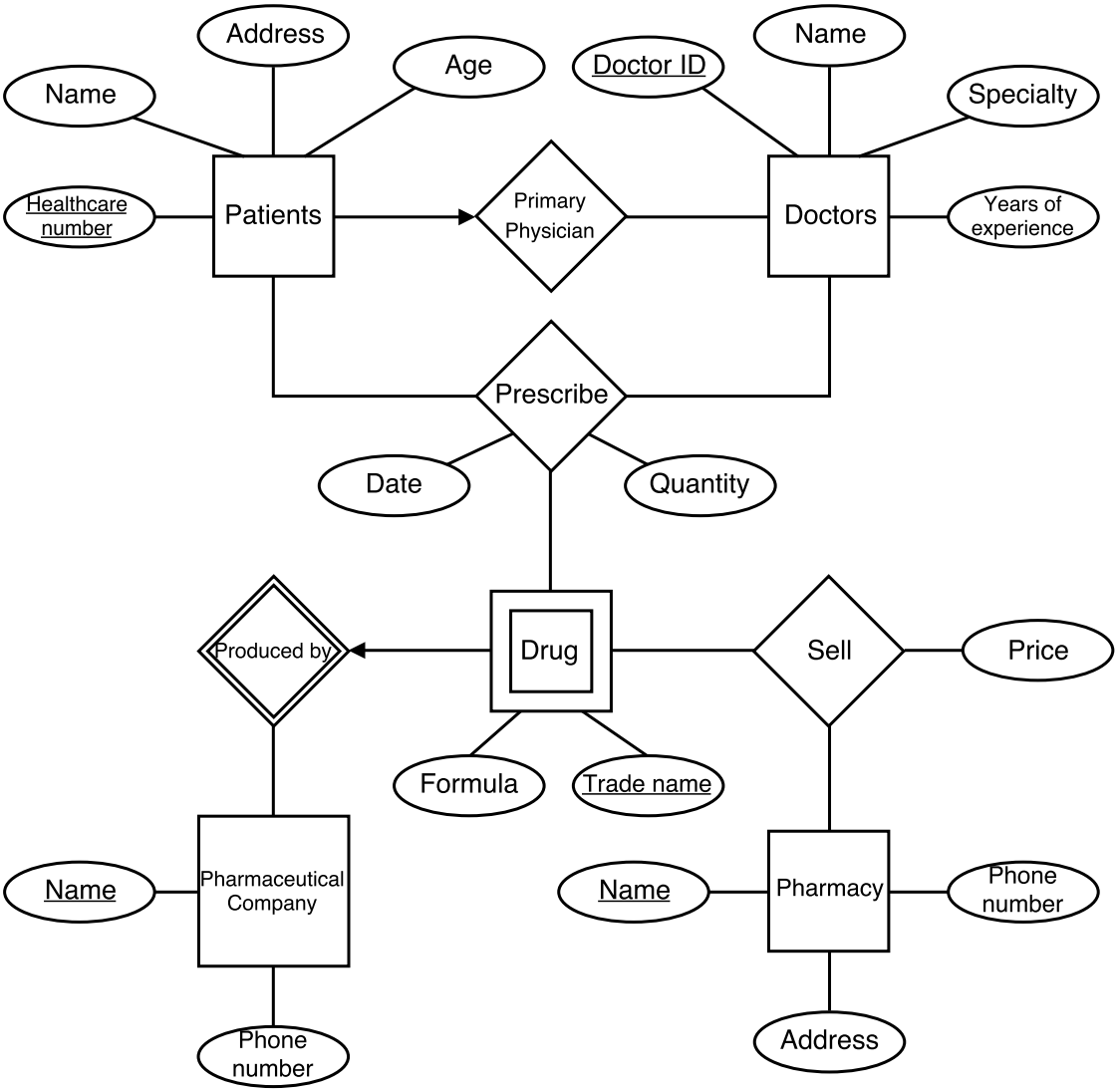
Ex.1

1.



2. a)

```
CREATE TABLE Patients (
        healthcare_number INT,
        name VARCHAR(20),
        address VARCHAR(50),
        age INT,
        PRIMARY KEY (healthcare_number),
);

CREATE TABLE Doctors (
        doctor_id INT,
        name VARCHAR(20),
        specialty VARCHAR(20),
        years_of_experience INT,
        PRIMARY KEY (doctor_id),
);

CREATE TABLE Pharmacy (
        pha_name VARCHAR(20),
        address VARCHAR(50),
        phone_number INT,
        PRIMARY KEY (pha_name),
);

CREATE TABLE Pharmaceutical_company (
        name VARCHAR(20),
        phone_number INT,
        PRIMARY KEY (name),
);

CREATE TABLE Drug_produce (
        trade_name VARCHAR(20),
        pha_co_name VARCHAR(20),
```

```
        formula VARCHAR(255),
        PRIMARY KEY (trade_name, pha_co_name),
        FOREIGN KEY (trade_name) REFERENCES
        Pharmaceutical_company (name) ON DELETE CASCADE,
        FOREIGN KEY (pha_co_name) REFERENCES
        Pharmaceutical_company (name) ON DELETE CASCADE,
);

CREATE TABLE Primary_physician (
        healthcare_number INT,
        doctor_id INT,
        PRIMARY KEY (healthcar_number, doctor_id),
);

CREATE TABLE Prescribe (
        healthcare_number INT,
        doctor_id INT,
        trade_name VARCHAR(20),
        date VARCHAR(20),
        quantity VARCHAR(20),
        PRIMARY KEY (healthcare_number, doctor_id, trade_name),
        FOREIGN KEY (trade_name) REFERENCES
        Drug_produce(trade_name) ON DELETE CASCEDE,
);

CREATE TABLE Sell (
        pha_name VARCHAR(20),
        trade_name VARCHAR(20),
        price INT,
        PRIMARY KEY (pha_name, trade_name),
        FOREIGN KEY (pha_name) REFERENCES
        Pharmacy(pha_name) ON DELETE CASCADE,
```

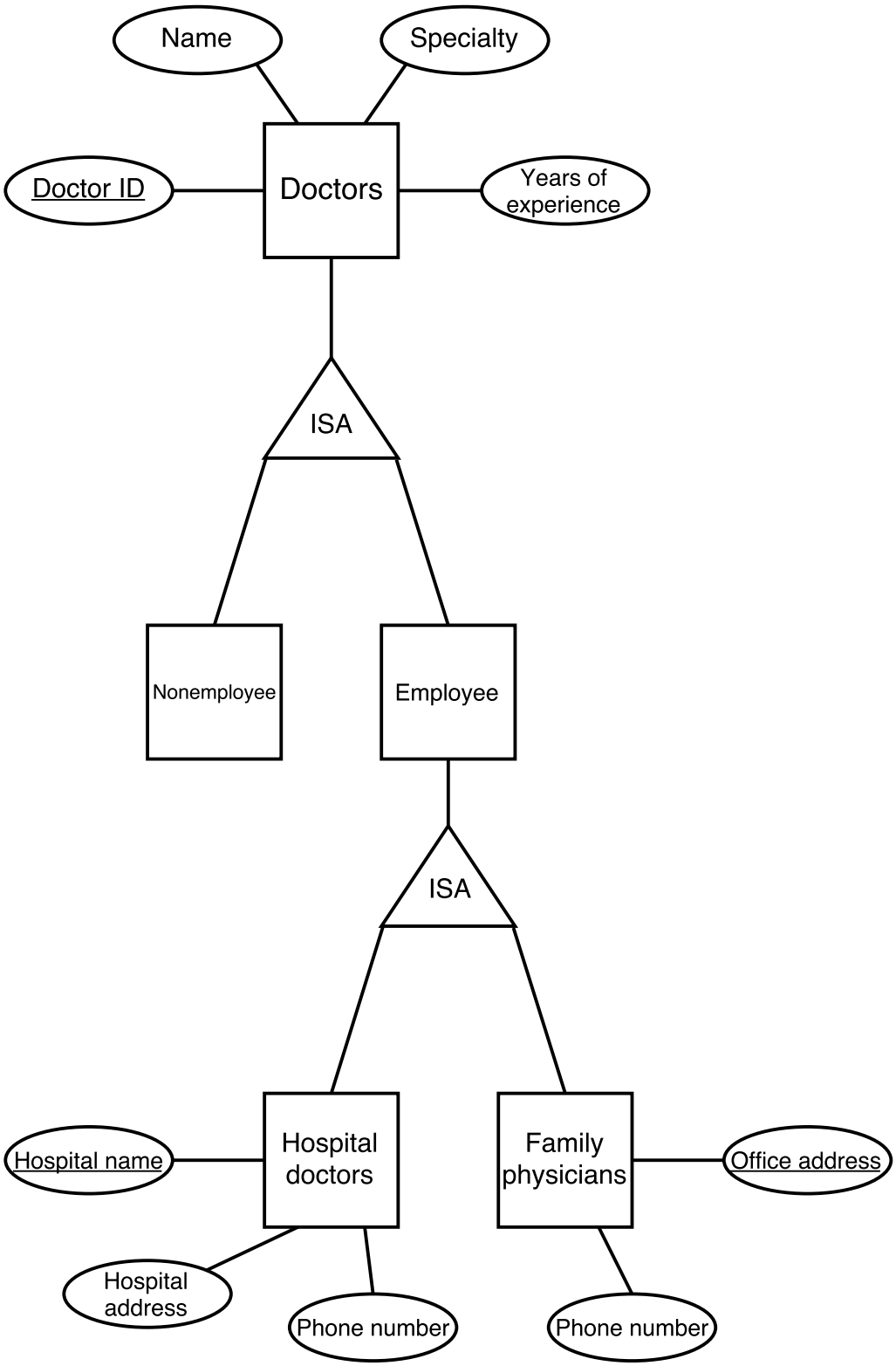
```
        FOREIGN KEY (trade_name) REFERENCES
        Drug_produce(trade_name) ON DELETE CASCADE,
);
```

b)

```
INSERT INTO Patients
VALUES (456123789, 'John Doe', '123 Abc St, Victoria BC', 25);

INSERT INTO Doctors
VALUES (999123, 'Jane Doctor', 'Psychiatry', 20);

INSERT INTO Pharmacy
VALUES ('Fast Pharmacy', '1111 Health Ave, Victoria BC',
250001111);

INSERT INTO Pharmaceutical_company
VALUES ('OK Medicine', '6041237890');

INSERT INTO Drug_produce
VALUES ('OK Aspirin', 'OK Medicine',
'http://okmedicine.ok/login/formula/');

INSERT INTO Primary Physician
VALUES (456123789, 999123);

INSERT INTO Prescribe
VALUES (456123789, 999123, 'OK Aspirin', '20 JAN 2017', '3
boxes');

INSERT INTO Sell
VALUES ('Fast Pharmacy', 'OK Aspirin', 10);
```

Ex.2

1.


Name
Specialty
Doctor ID
Doctors
Years of experience
ISA
Nonemployee
Employee
ISA
Hospital name
Hospital doctors
Family physicians
Office address
Hospital address
Phone number
Phone number

2.

```
CREATE TABLE Doctors (
    doctor_id INT,
    name VARCHAR(20),
    specialty VARCHAR(20),
    years_of_experience INT,
    PRIMARY KEY (doctor_id),
);

CREATE TABLE Nonemployee (
    doctor_id INT,
    name VARCHAR(20),
    specialty VARCHAR(20),
    years_of_experience INT,
    PRIMARY KEY (doctor_id),
);

CREATE TABLE Employee (
    doctor_id INT,
    name VARCHAR(20),
    specialty VARCHAR(20),
    years_of_experience INT,
    PRIMARY KEY (doctor_id),
);

CREATE TABLE Hospital_doctors (
    doctor_id INT,
    hospital_name VARCHAR(20),
    name VARCHAR(20),
    specialty VARCHAR(20),
    years_of_experience INT,
    hospital_address VARCHAR(50),
    phone_number INT,
```

```
    PRIMARY KEY (doctor_id, hospital_name);
);

CREATE TABLE Family_physicians (
    doctor_id INT,
    office_address(50),
    name VARCHAR(20),
    specialty VARCHAR(20),
    years_of_experience INT,
    phone_number INT,
    PRIMARY KEY (doctor_id, office_address),
);
```

3.

```
INSERT INTO Doctors
VALUES (202303888, ‘Jane Smith’, ‘Neurosurgery’, 18);
INSERT INTO Doctors
VALUES (789456000, ‘John Doe’, ‘Internal medicine’, 20);
INSERT INTO Doctors
VALUES (999123888, ‘Justin Jobless’, ‘Psychiatry’, 5);
INSERT INTO Doctors
VALUES (999778250, ‘Joe Public’, ‘Emergency medicine’, 8);

INSERT INTO Nonemployee
VALUES (999123888, ‘Justin Jobless’, ‘Psychiatry’, 5);

INSERT INTO Employee
VALUES (202303888, ‘Jane Smith’, ‘Neurosurgery’, 18);
INSERT INTO Employee
VALUES (789456000, ‘John Doe’, ‘Internal medicine’, 20);
INSERT INTO Employee
VALUES (999778250, ‘Joe Public’, ‘Emergency medicine’, 8);
```

```
INSERT INTO Hospital_doctors
VALUES (202303888, 'Victoria Hospital', 'Jane Smith', 'Neurosurgery',
18, '777 Safe St, Victoria BC', 2507778899);
INSERT INTO Hospital_doctors
VALUES (789456000, 'Royal Hospital', 'John Doe', 'Internal
medicine', 20, '999 This Ave, Vancouver BC', 7781231234);

INSERT INTO Family_physicians
VALUES (789456000, '202-222 That St, Richmond BC', 'John Doe',
'Internal medicine', 20, 7781231234);
INSERT INTO Family_physicians
VALUES (999778250, '1002-1010 Oh St, Nanaimo BC', 'Joe Public',
'Emergency medicine', 8, 2502502250);
```