

1. Find the Entity types

Pharmacy(name,phone number,address)

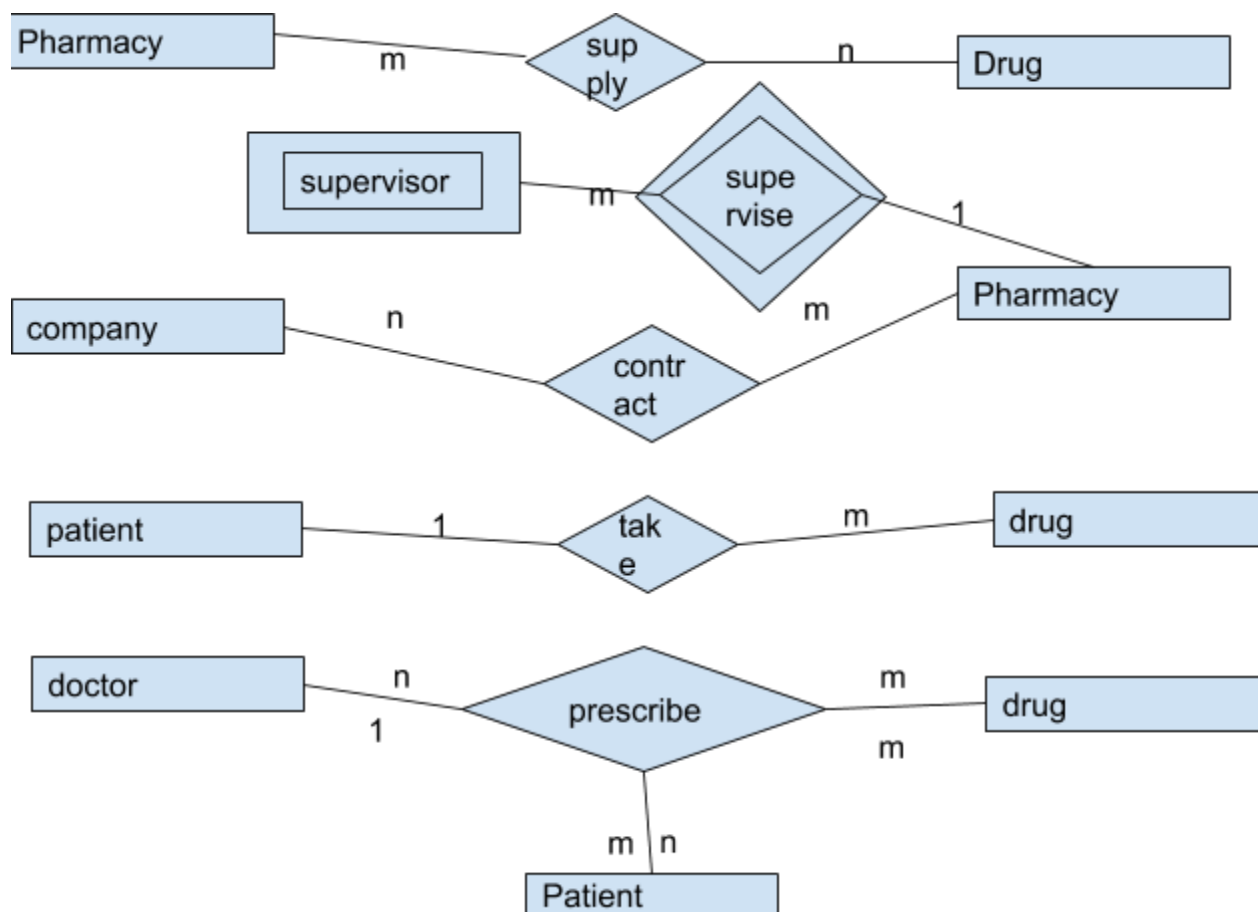
Patients(name,address,age)

Doctors(name,Speciality and years of experience)

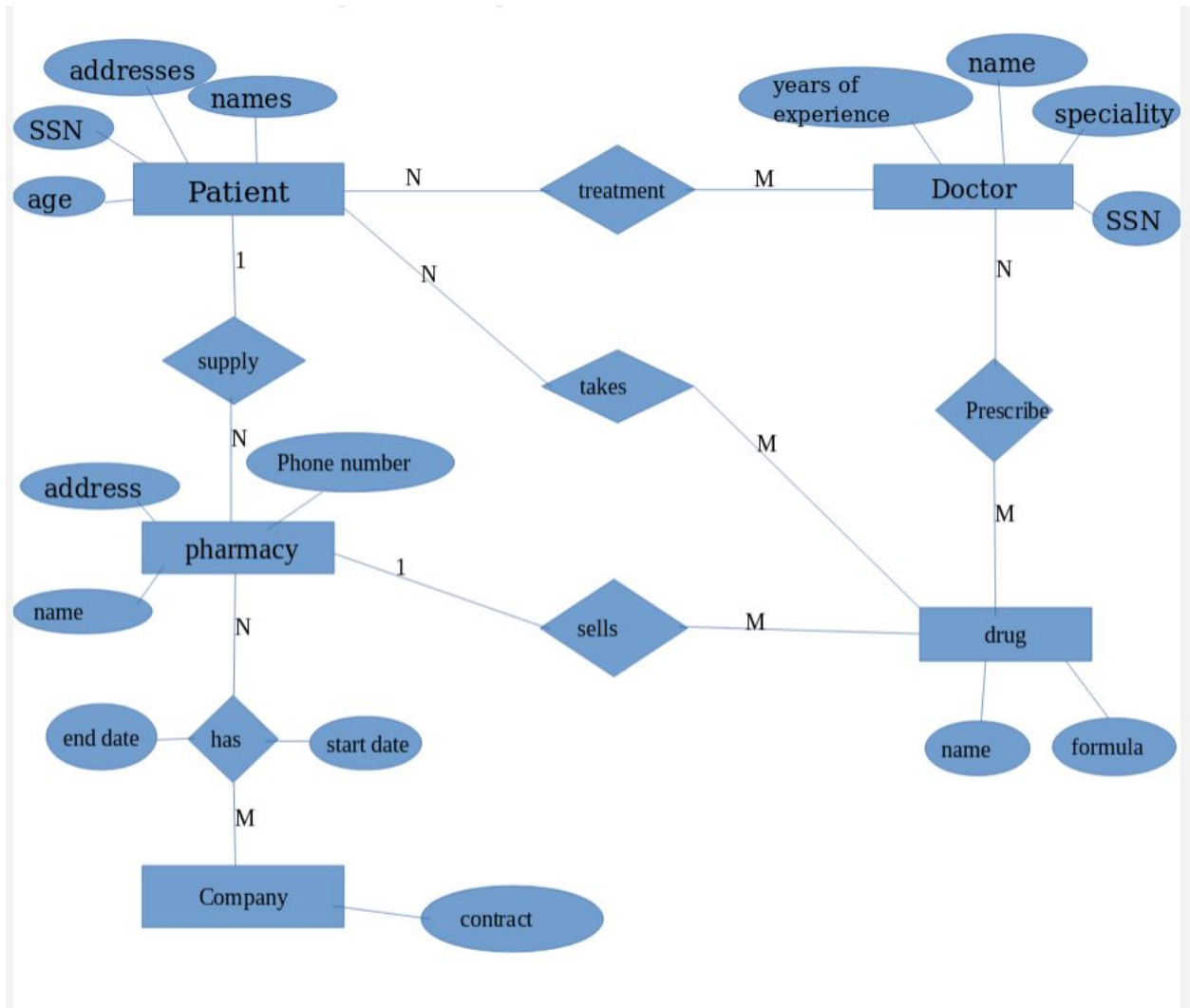
Drug(grade Name, formula)

Pharmaceutical companies(Name,PhoneNumber)

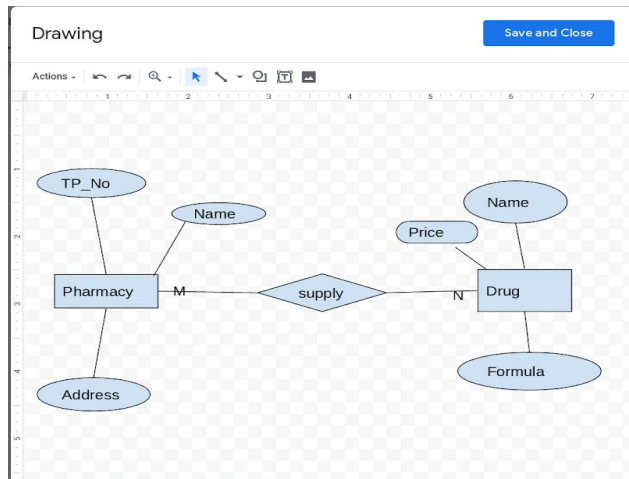
2. Draw ER diagram to each relationship separately.



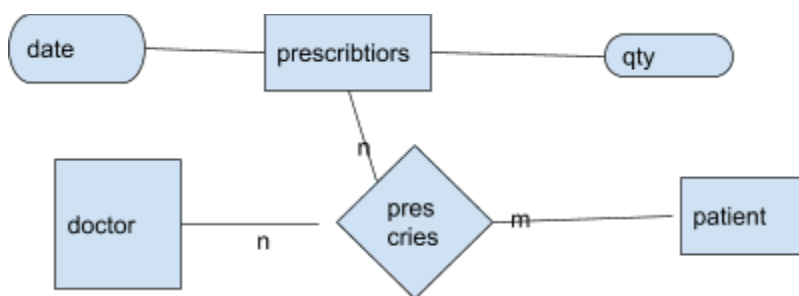
3. Draw a ER diagram that captures the above information.



4. How would your design change if each drug must be sold at a fixed price by all the pharmacies?



5. How would your design change if the design requirements change as follows: If a doctor prescribes the same drug for the same patient more than once, several such prescriptions may have to be stored separately?



6. Write Mongoose Schema for your diagram.

patient.js

```

var mongoose = require('mongoose');
var ids = require('./id')
var Schema = mongoose.Schema;
var patientSchema= new Schema({
  ssn:{type:String,unique:true,trim:true,required:true,index:true},
  userid:{type:Schema.Types.ObjectId,ref:'id',required:true},

```

```

        address:{type:String},

        name:{type:String},
        age:{type:Number}
    },{collection:'paitent'}));

    patientModel = mongoose.model('Paitent',usersSchema);
    module.exports={patientModel};

```

Pharmacy.js

```

var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var pharmacySchema= new Schema({
    address:{type:String},

    name:{type:String,unique:true,trim:true,required:true},
    age:{type:Number}
},{collection:'pharmacy'});

    pharmacyModel = mongoose.model('Pharmacy',usersSchema);
    module.exports={pharmacyModel};

```

drug.js

```

var mongoose = require('mongoose');
var users = require('./users');
var Schema = mongoose.Schema;
var drugSchema= new Schema({

    formala:{type:String,index:true},
    Tradename:{type:String,unique:true,trim:true,required:true},
    name:type:{Schema.Types.ObjectId,ref:'users',required:true}
},{collection:'drug'});

    drugModel = mongoose.model('Drug',gamesSchema);
    module.exports={drugModel};

```

doctor.js

```

var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var doctorSchema= new Schema({
  ssn:{type:String,unique:true,trim:true,required:true},

  speciality:{type:String},
  name:{type:String},
  years_of experience:{type:Number}
},{collection:'doctor'});

doctorModel = mongoose.model('Doctor',usersSchema);
module.exports={doctorModel};

```

company.js

```

var mongoose = require('mongoose');
var Schema = mongoose.Schema;
var companySchema= new Schema({

  contract:{type:Number},
  name:{type:String,unique:true,trim:true,required:true},
},
{collection:'company'});
companyModel = mongoose.model('Company',usersSchema);
module.exports={companyModel};

```