patients (ssn, name, address, birth-date, physician_id)

FK references:

- physician_id -> physicians (ssn)

physicians (ssn, name, primary_specialty, experience_years)

pharmacies (id, name, address, phone)

drugs (id, name) *# design choice to use name as the primary key instead of id*

prescriptions (id, patient_id, physician_id, drug_name, date, quantity)

FK references:

- patient_id -> patients (ssn)
- physician_id -> physicians (ssn)
- drug_name -> drugs (name)

adverse_interactions (drug_name, drug_name_2)

FK references:

- drug_name -> drugs (name)

alerts (patient_id, physician_id, alert_date, drug1, drug2)

FK references:

- patient_id -> patients (ssn)
- physician_id -> physicians (ssn)
- (patient_id, drug1) -> prescriptions (patient_id, drug_name)
- (patient_id, drug2) -> prescriptions (patient_id, drug_name)

 # The above two FK references are to ensure that patient was prescribed both drug1 and drug2

 # We assume that prescription of drug2 is what triggers the entry in the alerts table

pharmacy_fills (prescription_id, pharmacy_id, date, cost)

FK references:

- prescription_id -> prescriptions(id)
- pharmacy_id -> pharmacy(id)

 # Here we are assuming that pharmacies sell only prescription drugs

companies (id, name, address, contact_phone, contact_name)

contracts (id, company_id, pharmacy_id, drug_name, dosage, quantity, date)

FK references:

- company_id -> companies (id)
- pharmacy_id -> pharmacies (id)
- drug_name -> drugs (name)