1. Table Listing:
   Amenities - Size: 200
   Assign - Size: 200
   Assigned_To - Size: 200
   Bill - Size: 200
   Clerks - Size: 200
   Doctors - Size: 200
   Maintenance - Size: 200
   Management - Size: 200
   Medical_Imaging - Size: 200
   Nurses - Size: 200
   Patients - Size: 200
   Rooms - Size: 200
   Sanitation - Size: 200
   Take_Measurements - Size: 200
   Treatments - Size: 200

2. For generating data, we used a couple different methods. Primarily, we used Mockaroo which allowed us to generate random names for patients and employees as well as randomized values for fields such as address, SSN and dates. It also allowed for use of formulas to interact between fields. For example, the check out time of doctors is eight hours after their check in time. We were also able to set constraints on fields such as setting a range of possible salaries for different employee types. The bulk of the work was done as a group with all of our laptops.

   We weren't able to use Mockaroo to fill in the price column of our bill table since it relies on values from several other tables. We decided to insert price as null into our table and use an SQL script to calculate it after insertion:

```
UPDATE Bill SET Price = (SELECT Nights_Stayed * 100 FROM Patients
WHERE SSN_FK = SSN);

UPDATE BILL SET Price = Price + (SELECT Amenities_Flag *
((Cafeteria_Flag * Amenities_Price) + (Vending_Machines_Flag *
Amenities_Price) + (ATM_Flag * Amenities_Price) + (Wifi_Flag *
Amenities_Price) + (Uber_Flag * Amenities_Price)) FROM Amenities
WHERE Amenity_ID = AmenityID);

UPDATE Bill SET Price = Price + (SELECT Treatment_Flag *
(Medical_Imaging_Flag * (XRay_Flag * Medical_Imaging_Price +
MRI_Flag * Medical_Imaging_Price + Cat_Flag *
Medical_Imaging_Price + Ultra_Flag * Medical_Imaging_Price) +
Treatment_Flag * (Surgery_Flag * Treatments_Price +
```

```
Materials_Flag * Treatments_Price + PT_Flag * Treatments_Price +
Medicine_Flag * Treatments_Price)) FROM Medical_Imaging JOIN
Treatments WHERE MedicalID = Medical_Imaging_ID_FK AND
TreatmentID = Treatment_ID);
```

That is, $100 for each night stayed, plus $10 for every amenity, plus $1000 for every treatment, plus $500 for every medical imaging device used.

We also realized while working on our database that values we chose for patient age didn't match their date of birth, so we used this SQL script to update to the correct values:

```
UPDATE Patients SET Age = cast(strftime('%Y.%m%d', 'now') -
(substr(DOB,7)||"."||substr(DOB,1,2)||substr(DOB,4,2)) as int);
```

Which takes the current date as a float, formats the DOB field as a float, subtracts them, then casts the result as an integer.