CREATE TABLE hospital (

hosp\_number DECIMAL(12) NOT NULL,

h\_address VARCHAR(22),

PRIMARY KEY (hosp\_number));

CREATE TABLE department (

dep\_id DECIMAL(12) NOT NULL,

dep\_name VARCHAR(22) NOT NULL,

hosp\_number INT NOT NULL,

PRIMARY KEY (dep\_id),

FOREIGN KEY (hosp\_number) REFERENCES hospital (hosp\_number));

CREATE TABLE doctors (

doc\_id DECIMAL(12) NOT NULL,

d\_fname VARCHAR(12) NOT NULL,

d\_lname VARCHAR(12) NOT NULL,

d\_dob DATE NOT NULL,

d\_gend VARCHAR(6) NOT NULL,

tel\_numb VARCHAR(12) NOT NULL,

salary INT NOT NULL,

dep\_id DECIMAL(12) NOT NULL,

PRIMARY KEY (doc\_id),

FOREIGN KEY (dep\_id) REFERENCES department(dep\_id));

CREATE TABLE treatment (

treat\_id DECIMAL(12) NOT NULL,

treat\_desc TEXT NOT NULL,

PRIMARY KEY (treat\_id));

CREATE TABLE bill (

bill\_id DECIMAL(12) NOT NULL,

price INT NOT NULL,

treat\_id DECIMAL(12) NOT NULL,

PRIMARY KEY (bill\_id),

FOREIGN KEY (treat\_id) REFERENCES treatment(treat\_id));

CREATE TABLE rooms(

room\_id DECIMAL(12),

room\_type VARCHAR(12),

PRIMARY KEY (room\_id),

status BOOLEAN

);

CREATE TABLE patients (

p\_id DECIMAL(12) NOT NULL,

p\_fname VARCHAR(12) NOT NULL,

p\_lname VARCHAR(12) NOT NULL,

p\_dob DATE NOT NULL,

p\_gend VARCHAR(6) NOT NULL,

p\_address VARCHAR(32) NOT NULL,

tel\_numb VARCHAR(12) NOT NULL,

date\_admitted DATE NULL,

date\_discharged DATE NULL,

bill\_id DECIMAL(12) NOT NULL,

room\_id DECIMAL(12) NOT NULL,

PRIMARY KEY (p\_id),

FOREIGN KEY (bill\_id) REFERENCES bill(bill\_id),

FOREIGN KEY (room\_id) REFERENCES rooms(room\_id)

);

CREATE TABLE appointments (

app\_id DECIMAL(12) NOT NULL,

app\_date DATE NOT NULL,

app\_time TIME NOT NULL,

p\_id DECIMAL(12) NOT NULL,

doc\_id DECIMAL(12) NOT NULL,

PRIMARY KEY (app\_id),

FOREIGN KEY (p\_id) REFERENCES patients(p\_id),

FOREIGN KEY (doc\_id) REFERENCES doctors (doc\_id));

INSERT INTO hospital(hosp\_number, h\_address)

VALUES

(17, '820 Lindbergh Drive');

INSERT INTO department(dep\_id, dep\_name, hosp\_number)

VALUES

(01, 'Accident and Emergency', 17),

(02, 'Anesthetics', 17),

(03, 'Cardiology', 17),

(04, 'Diagnostic Imaging', 17),

(05, 'Critical Care', 17),

(06, 'General Surgery', 17),

(07, 'Urology', 17),

(08, 'Gynecology', 17),

(09, 'Infection Control', 17),

(10, 'Neurology', 17);

INSERT INTO doctors(doc\_id, d\_fname, d\_lname, d\_dob, d\_gend, tel\_numb, salary, dep\_id)

VALUES

(3008, 'Jodie', 'Whines', '1979-07-22', 'Male', '630-688-1327', 37000, 02),

(2074, 'Toddy', 'Tulloch', '1987-02-03', 'Male', '974-841-2339', 25000, 03),

(5374, 'Garvy', 'Kernar', '1985-05-01', 'Male', '549-609-0596', 25000, 08),

(4879, 'Max', 'Toplin', '1971-04-25', 'Female', '595-319-8097', 22000, 09),

(8896, 'Chip', 'Mariyushkin', '1990-05-04', 'Male', '794-493-1412', 19000, 05),

(9418, 'Maudie', 'Follet', '1971-08-30', 'Female', '641-553-6835', 33000, 02),

(9273, 'Blanche', 'Goghin', '1987-08-04', 'Female', '780-954-0786', 30000, 04),

(3489, 'Maryellen', 'MacRanald', '1975-12-26', 'Female', '212-410-4734', 15000, 07),

(7140, 'Darlene', 'Linklet', '1986-04-17', 'Female', '152-635-0292', 23000, 06),

(3150, 'Jean', 'Rodinger', '1983-04-14', 'Male', '431-560-5054', 37000, 08),

(8269, 'Kellina', 'Swindley', '1985-12-02', 'Female', '938-653-3730', 15000, 10),

(6827, 'Cece', 'Skeemer', '1979-03-27', 'Male', '489-212-8513', 17000, 01),

(1242, 'Gertie', 'Ziemen', '1974-04-16', 'Female', '378-122-7448', 23000, 03),

(6593, 'Wilmette', 'Edwinson', '1976-07-27', 'Female', '151-168-0821', 33000, 06),

(8498, 'Caril', 'Mattiello', '1986-03-08', 'Female', '999-280-6787', 30000, 09),

(5196, 'Naomi', 'Smithson', '1990-08-28', 'Female', '888-205-4434', 22000, 07),

(9923, 'Sholom', 'Rebanks', '1983-12-03', 'Male', '453-704-2254', 22000, 10),

(5398, 'Burt', 'Treslove', '1970-12-07', 'Male', '389-618-0712', 17000, 01),

(1695, 'Huberto', 'Flintiff', '1987-09-10', 'Male', '608-698-5818', 19000, 04),

(3279, 'Fawnia', 'Schroter', '1988-08-11', 'Female', '717-179-9271', 22000, 05);

INSERT INTO treatment(treat\_id, treat\_desc)

VALUES

(108, 'Musculoskeletal Injuries'),

(342, 'First Aid'),

(189, 'Tensilon Test'),

(221, 'Arm X-ray'),

(848, 'Coronary Artery Bypass'),

(938, 'Anesthesia '),

(245, 'Vacnination'),

(216, 'Sleep Study'),

(962, 'First Aid'),

(188, 'Vactination'),

(580, 'MRI'),

(658, 'Adhesiolysis'),

(137, 'Atherectomy'),

(237, 'Central Line Placement'),

(696, 'Anesthesia'),

(622, 'Hydrocoele '),

(993, 'Embolic Protection'),

(463, 'Invasive Cardiac Monitoring'),

(728, 'Circumcision'),

(710, 'Cervical (Cone) Biopsy');

INSERT INTO bill(bill\_id, price, treat\_id)

VALUES

(4619, 4000, 108),

(9038, 1500, 342),

(2715, 3000, 189),

(2247, 4500, 221),

(8544, 1000, 848),

(8168, 2000, 938),

(7843, 4000, 245),

(4743, 2100, 216),

(4620, 3000, 962),

(4613, 2222, 188),

(6916, 2000, 580),

(6536, 4500, 658),

(3389, 1800, 137),

(6309, 4000, 237),

(5010, 3000, 696),

(4836, 3100, 622),

(3656, 2100, 993),

(6974, 2200, 463),

(3636, 1600, 728),

(2207, 3500, 710);

INSERT INTO rooms(room\_id, room\_type, occupied)

VALUES

(101, 'single', 'TRUE'),

(102, 'double', 'TRUE'),

(103, 'single', 'TRUE'),

(104, 'single', 'FALSE'),

(105, 'triple', 'TRUE'),

(106, 'double', 'TRUE'),

(107, 'triple', 'TRUE'),

(108, 'triple', 'TRUE'),

(109, 'triple', 'TRUE'),

(110, 'triple', 'FALSE');

INSERT INTO patients(p\_id, p\_fname, p\_lname, p\_dob, p\_gend, p\_address, tel\_numb, date\_admitted, date\_discharged, bill\_id, room\_id)

VALUES

(23210, 'Marybeth', 'Allmark', '1989-10-02', 'Female', '860 Clemons Road', '393-239-8697', '2020-07-10', '2020-08-13', 4619, 101),

(15668, 'Berti', 'Puttock', '2004-03-26', 'Male', '708 Springs Place', '445-104-7293', '2020-06-23', '2020-07-07', 9038, 102),

(46367, 'Roz', 'Creser', '2006-09-16', 'Female', '5 Gerald Street', '432-649-1184', '2020-08-09', '2020-08-30', 2715, 103),

(74983, 'Wendell', 'Wingate', '1978-03-20', 'Male', '9 Linden Road', '601-499-3788', '2020-08-02', '2020-08-31', 2247, 102),

(13610, 'Winnifred', 'Schooley', '1981-07-02', 'Female', '24928 Kenwood Pass', '251-989-2531', '2020-09-15', '2020-09-18', 8544, 105),

(69663, 'Walt', 'Finnis', '1953-05-06', 'Male', '9634 Luster Center', '962-538-0203', '2020-10-16', '2020-11-01', 8168, 106),

(74539, 'Gale', 'Hartly', '1983-04-07', 'Male', '1811 Anzinger Place', '973-347-2835', '2020-07-15', '2020-07-30', 7843, 105),

(51974, 'Conway', 'Pleven', '1980-06-16', 'Male', '7 Pond Lane', '859-491-1849', '2020-10-13', '2020-11-09', 4743, 106),

(20564, 'Sada', 'Jirik', '1979-06-07', 'Female', '122 Sachs Avenue', '720-962-8754', '2020-04-28', '2020-05-09', 4620, 105),

(26794, 'Danit', 'Kirkbride', '1995-03-17', 'Female', '8365 Elka Parkway', '916-497-9545', '2020-06-02', '2020-06-18', 4613, 107),

(90524, 'Al', 'Chater', '1960-02-26', 'Male', '219 Hayes Plaza', '369-692-7123', '2020-07-01', '2020-07-11', 6916, 107),

(13357, 'Diana', 'Lerer', '1956-05-24', 'Female', '2394 Springview Street', '849-628-8108', '2020-08-29', '2020-09-06', 6536, 107),

(49325, 'Korrie', 'Kiefer', '1955-08-15', 'Female', '942 Twin Pines Street', '212-835-0795', '2020-09-02', '2020-09-11', 3389, 108),

(60517, 'Windy', 'Gutans', '2008-11-21', 'Female', '9 Novick Way', '912-991-5131', '2020-04-02', '2020-04-17', 6309, 109),

(68533, 'Faye', 'FitzGilbert', '1950-09-04', 'Female', '5814 Schurz Junction', '151-440-4122', '2020-04-30', '2020-05-10', 5010, 108),

(33858, 'Eli', 'Fitzsimmons', '1981-10-03', 'Male', '8821 Melrose Drive', '865-775-1077', '2020-02-04', '2020-02-18', 4836, 108),

(71562, 'Jasun', 'Grand', '1992-08-22', 'Male', '213 Rutledge Point', '815-597-3487', '2020-03-22', '2020-03-28', 3656, 109),

(93582, 'Arielle', 'Gilford', '1960-06-29', 'Female', '1 8th Terrace', '958-664-8767', '2020-06-27', '2020-07-07', 6974, 109),

(79022, 'Ax', 'Bynert', '1965-12-04', 'Male', '3 3rd Pass', '317-370-0902', '2020-08-07', '2020-08-14', 3636, 110),

(57178, 'Garvy', 'Skill', '1952-02-04', 'Male', '254 Anthes Parkway', '741-157-9025', '2020-01-29', '2020-02-11', 2207, 110);

INSERT INTO appointments(app\_id, app\_date, app\_time, p\_id, doc\_id)

VALUES

(900, '2020-07-08', '12:00', 23210, 3008),

(954, '2020-06-20', '8:45', 15668, 2074),

(571, '2020-08-07', '12:50', 46367, 5374),

(274, '2020-07-30', '12:54', 74983, 4879),

(686, '2020-09-10', '12:45', 13610, 8896),

(353, '2020-10-14', '13:30', 69663, 9418),

(841, '2020-07-06', '14:45', 74539, 9273),

(317, '2019-10-10', '14:39', 51974, 3489),

(741, '2020-04-21', '8:59', 20564, 7140),

(247, '2020-06-01', '13:09', 26794, 3150),

(919, '2020-06-28', '16:31', 90524, 8269),

(613, '2020-08-25', '17:34', 13357, 6827),

(363, '2020-08-30', '9:24', 49325, 1242),

(858, '2019-04-01', '11:06', 60517, 6593),

(287, '2020-04-20', '11:36', 68533, 8498),

(462, '2020-02-02', '10:24', 33858, 5196),

(898, '2019-03-20', '14:58', 71562, 9923),

(191, '2019-06-22', '8:21', 93582, 5398),

(429, '2020-08-05', '13:09', 79022, 1695),

(811, '2020-01-25', '17:35', 57178, 3279);

ALTER TABLE rooms

RENAME TO occupied\_room;

ALTER TABLE doctors

ADD COLUMN hire\_date DATE;

ALTER TABLE doctors

DROP COLUMN hire\_date;

ALTER TABLE patients

ADD CONSTRAINT tel\_numb UNIQUE (tel\_numb);

ALTER TABLE patients

DROP CONSTRAINT tel\_numb;

SELECT MAX(salary), MIN(salary), SUM(salary), AVG(salary)

FROM doctors;

SELECT doc\_id, d\_fname, d\_lname, salary, dep\_id, d\_gend

FROM doctors

WHERE d\_gend = 'Female';

SELECT COUNT (d\_gend)

FROM doctors

WHERE d\_gend = 'Male'

GROUP BY dep\_id;

SELECT doc\_id, d\_fname, d\_lname, salary, dep\_id

FROM doctors

WHERE salary > 25000;

SELECT doctors.d\_fname, doctors.d\_lname, doctors.doc\_id, department.dep\_id, doctors.salary

FROM doctors

LEFT OUTER JOIN department

ON doctors.dep\_id = department.dep\_id

WHERE doctors.salary > (SELECT MIN(salary) FROM doctors);

SELECT patients.p\_id, occupied\_room.room\_id, occupied\_room.room\_type, occupied\_room.occupied

FROM occupied\_room

INNER JOIN patients

ON patients.room\_id = occupied\_room.room\_id

WHERE occupied = 'FALSE';