# Homework 3

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September 16, 2018

## **Tables**

```
DEPARTMENT(<u>DepartmentID</u>, Name, OfficeAddress, DepartmentHead, OfficePhone)

EMPLOYEE(<u>EmployeeID</u>, Name, Phone, Email, Address, SSN, Certification)

AFFILIATION(<u>EmployeeID</u>, <u>DepartmentID</u>)

ROOM(<u>RoomNumber</u>, Floor, RoomType, Available, RoomPhone)

SHIFT(<u>ShiftID</u>, Date, StartTime, EndTime, <u>EmployeeID</u>, <u>RoomNumber</u>)

PATIENT(<u>PatientID</u>, Name, Phone, Email, Address, SSN, InsuranceNumber)

APPOINTMENT(<u>AppointmentID</u>, Date, StartTime, EndTime, Description, <u>EmployeeID</u>, <u>PatientID</u>, RoomNumber)
```

## Create Tables and Insert values with MySQL

## **DEPARTMENT**

```
In [2]: CREATE TABLE DEPARTMENT

(

DepartmentID INT AUTO_INCREMENT

PRIMARY KEY,

Name VARCHAR(100) NOT NULL,

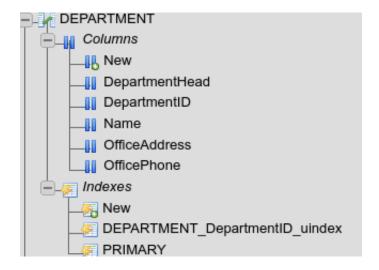
OfficeAddress VARCHAR(100) NULL,

DepartmentHead VARCHAR(100) NULL,

OfficePhone VARCHAR(100) NULL,

UNIQUE (DepartmentID)

);
```



```
In []: INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VALUES
          ('Neurology', 'Area A, Floor 1', 'Dr. Gregory House', '(814) 587-2335');
        INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VALUES
          ('Cardiology', 'Area B, Floor 2', 'Dr. Lisa Cuddy', '(814) 587-2334');
        INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VALUES
          ('Critical care', 'Area C, Floor 3', 'Dr. Eric Foreman', '(814) 587-2339');
        INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VALUES
          ('Diagnostic imaging', 'Area D, Floor 4', 'Dr. Allison Cameron', '(814) 587-2336');
        INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VALUES
          ('Oncology', 'Area E, Floor 5', 'Dr. James Wilson', '(814) 587-2331');
   1 row inserted.
   Inserted row id: 1 (Query took 0.0479 seconds.)
   INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VAL-
UES ('Neurology', 'Area A, Floor 1', 'Dr. Gregory House', '(814) 587-2335')
   1 row inserted.
   Inserted row id: 2 (Query took 0.3064 seconds.)
   INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VAL-
UES ('Cardiology', 'Area B, Floor 2', 'Dr. Lisa Cuddy', '(814) 587-2334')
   1 row inserted.
   Inserted row id: 3 (Query took 0.0391 seconds.)
   INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VAL-
UES ('Critical care', 'Area C, Floor 3', 'Dr. Eric Foreman', '(814) 587-2339')
   1 row inserted.
   Inserted row id: 4 (Query took 0.0460 seconds.)
   INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VAL-
UES ('Diagnostic imaging', 'Area D, Floor 4', 'Dr. Allison Cameron', '(814) 587-2336')
```

Inserted row id: 5 (Query took 0.0459 seconds.)

INSERT INTO DEPARTMENT (Name, OfficeAddress, DepartmentHead, OfficePhone) VAL-UES ('Oncology', 'Area E, Floor 5', 'Dr. James Wilson', '(814) 587-2331')



## **EMPLOYEE**

```
In [ ]: CREATE TABLE EMPLOYEE
          EmployeeID INT AUTO_INCREMENT
            PRIMARY KEY,
                     VARCHAR(100) NULL,
          Phone
                     VARCHAR(20) NULL,
          Email
                     VARCHAR(30) NULL,
          Address
                     VARCHAR(100) NULL,
          SSN
                     VARCHAR(20) NULL,
          Certification
                          VARCHAR(100) NULL,
          CONSTRAINT EMPLOYEE_EmployeeID_uindex
          UNIQUE (EmployeeID)
        );
```



INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Heather Brooks', '(814) 563-7404', 'hb@gmail.com', 'Ap #651-8679 Sodales Av. Tamuning PA', '770-20-4509', 'Advanced Oncology Certified Nurse (AOCN)');

1 row inserted.

Inserted row id: 1 (Query took 0.0845 seconds.)

INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Sydney Heron', '(814) 563-7401', 'sh@gmail.com', '711-2880 Nulla St. Mankato PA', '670-20-1234', 'Certified Pediatric Nurse (CPN)')

1 row inserted.

Inserted row id: 2 (Query took 0.0371 seconds.)

INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Reed Adamson', '(814) 563-7402', 'ra@gmail.com', '606-3727 Ullamcorper. Street Roseville PA', '670-20-4321', 'AIDS Certified Registered Nurse (ACRN)')

1 row inserted.

Inserted row id: 3 (Query took 0.0376 seconds.)

INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Megan Mostow', '(814) 563-7403', 'mm@gmail.com', 'Ap #867-859 Sit Rd. Azusa New York', '670-20-6789', 'Family Nurse Practitioner')

1 row inserted.

Inserted row id: 4 (Query took 0.0379 seconds.)

INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Sadie Harris', '(814) 563-7404', 'sah@gmail.com', '7292 Dictum Av. San Antonio MI', '770-20-4356', 'Certified Registered Nurse Anesthetist (CRNA)')

1 row inserted.

Inserted row id: 5 (Query took 0.0395 seconds.)

INSERT INTO EMPLOYEE (Name, Phone, Email, Address, SSN, Certification) VALUES ('Heather Brooks', '(814) 563-7404', 'hb@gmail.com', 'Ap #651-8679 Sodales Av. Tamuning PA', '770-20-4509', 'Advanced Oncology Certified Nurse (AOCN)')



#### **AFFILIATION**

```
In [ ]: CREATE TABLE AFFILIATION
          EmployeeID
                       INT NOT NULL,
          DepartmentID INT NOT NULL,
          CONSTRAINT AFFILIATION_EmployeeID_uindex
          UNIQUE (EmployeeID),
          CONSTRAINT AFFILIATION_DepartmentID_uindex
          UNIQUE (DepartmentID),
          CONSTRAINT AFFILIATION_EMPLOYEE_EmployeeID_fk
          FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEE (EmployeeID)
            ON UPDATE CASCADE
            ON DELETE CASCADE,
          CONSTRAINT AFFILIATION_DEPARTMENT_DepartmentID_fk
          FOREIGN KEY (DepartmentID) REFERENCES DEPARTMENT (DepartmentID)
            ON UPDATE CASCADE
            ON DELETE CASCADE
        );
```



1 row inserted. (Query took 0.0420 seconds.)

INSERT INTO AFFILIATION (EmployeeID, DepartmentID) VALUES (2, 4)

1 row inserted. (Query took 0.1310 seconds.)

INSERT INTO AFFILIATION (EmployeeID, DepartmentID) VALUES (3, 2)

1 row inserted. (Query took 0.0391 seconds.)

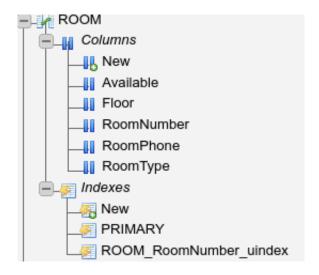
 $INSERT\ INTO\ AFFILIATION\ (EmployeeID,\ DepartmentID)\ VALUES\ (4,1)$ 

1 row inserted. (Query took 0.0403 seconds.)

INSERT INTO AFFILIATION (EmployeeID, DepartmentID) VALUES (5, 5)



## **ROOM**



Inserted row id: 1 (Query took 0.0929 seconds.)

INSERT INTO ROOM (Floor, RoomType, Available, RoomPhone) VALUES (4, 'Surgery', 1, '(814) 873-7090')

1 row inserted.

Inserted row id: 2 (Query took 0.0539 seconds.)

INSERT INTO ROOM (Floor, RoomType, Available, RoomPhone) VALUES (2, 'Consulting', 1, '(814) 873-7091')

1 row inserted.

Inserted row id: 3 (Query took 0.0470 seconds.)

INSERT INTO ROOM (Floor, RoomType, Available, RoomPhone) VALUES (1, 'Dispensary', 1, '(814) 873-7092')

1 row inserted.

Inserted row id: 4 (Query took 0.0896 seconds.)

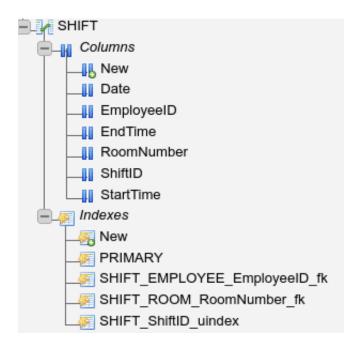
INSERT INTO ROOM (Floor, RoomType, Available, RoomPhone) VALUES (1, 'ER', 1, '(814) 873-7093')

1 row inserted. Inserted row id: 5 (Query took 0.0863 seconds.) INSERT INTO ROOM (Floor, RoomType, Available, RoomPhone) VALUES (5, 'ICU', 1, '(814) 873-7094')



#### **SHIFT**

```
In [ ]: CREATE TABLE SHIFT
        (
          ShiftID
                     INT AUTO_INCREMENT
            PRIMARY KEY,
                     DATE NULL,
          Date
          StartTime TIME NULL,
          EndTime
                     TIME NULL,
          EmployeeID INT NOT NULL,
          RoomNumber INT NOT NULL,
          CONSTRAINT SHIFT_ShiftID_uindex
          UNIQUE (ShiftID),
          CONSTRAINT SHIFT_EMPLOYEE_EmployeeID_fk
          FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEE (EmployeeID)
            ON UPDATE CASCADE
            ON DELETE CASCADE,
          CONSTRAINT SHIFT_ROOM_RoomNumber_fk
          FOREIGN KEY (RoomNumber) REFERENCES ROOM (RoomNumber)
            ON UPDATE CASCADE
            ON DELETE CASCADE
        );
        CREATE INDEX SHIFT_EMPLOYEE_EmployeeID_fk
          ON SHIFT (EmployeeID);
        CREATE INDEX SHIFT_ROOM_RoomNumber_fk
          ON SHIFT (RoomNumber);
```



Inserted row id: 1 (Query took 0.0384 seconds.)

INSERT INTO SHIFT (Date, StartTime, EndTime, EmployeeID, RoomNumber) VALUES ('2018-09-10', '09:00:00', '18:00:00', 1, 3)

1 row inserted.

Inserted row id: 2 (Query took 0.0439 seconds.)

INSERT INTO SHIFT (Date, StartTime, EndTime, EmployeeID, RoomNumber) VALUES ('2018-09-10', '09:00:00', '15:00:00', 2, 1)

1 row inserted.

Inserted row id: 3 (Query took 0.2483 seconds.)

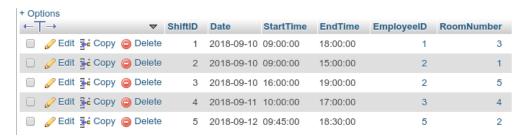
INSERT INTO SHIFT (Date, StartTime, EndTime, EmployeeID, RoomNumber) VALUES ('2018-09-10', '16:00:00', '19:00:00', 2, 5)

1 row inserted.

Inserted row id: 4 (Query took 0.0460 seconds.)

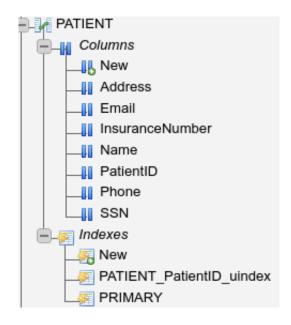
INSERT INTO SHIFT (Date, StartTime, EndTime, EmployeeID, RoomNumber) VALUES ('2018-09-11', '10:00:00', '17:00:00', 3, 4)

1 row inserted. Inserted row id: 5 (Query took 0.0385 seconds.) INSERT INTO SHIFT (Date, StartTime, EndTime, EmployeeID, RoomNumber) VALUES ('2018-09-12', '09:45:00', '18:30:00', 5, 2)



## **PATIENT**

```
In [ ]: CREATE TABLE PATIENT
        (
          PatientID
                          INT AUTO_INCREMENT
            PRIMARY KEY,
                          VARCHAR(100) NULL,
          Name
          Phone
                          VARCHAR(20)
                                        NULL,
          Email
                          VARCHAR(30)
                                        NULL,
          Address
                          VARCHAR(100) NULL,
          SSN
                          VARCHAR(20)
                                       NULL,
          InsuranceNumber VARCHAR(20)
                                       NULL,
          CONSTRAINT PATIENT_PatientID_uindex
          UNIQUE (PatientID)
        );
```



Inserted row id: 1 (Query took 0.0370 seconds.)

INSERT INTO PATIENT (Name, Phone, Email, Address, SSN, InsuranceNumber) VALUES ('Lawrence Moreno', '(684) 579-1879', 'lm@gmail.com', '935-9940 Tortor. Street Santa Rosa MN', '033-62-1234', 'ZW 27 84 44 D')

1 row inserted.

Inserted row id: 2 (Query took 0.0366 seconds.)

INSERT INTO PATIENT (Name, Phone, Email, Address, SSN, InsuranceNumber) VALUES ('Aaron Hawkins', '(660) 663-4518', 'im@gmail.com', '5587 Nunc. Avenue Erie Rhode Island', '574-28-4856', 'OA 45 22 60 C')

1 row inserted.

Inserted row id: 3 (Query took 0.0717 seconds.)

INSERT INTO PATIENT (Name, Phone, Email, Address, SSN, InsuranceNumber) VALUES

('Melvin Porter', '(959) 119-8364', 'mp@gmail.com', 'P.O. Box 132 1599 Curabitur Rd. Bandera South Dakota', '394-13-4509', 'NC 18 31 22 C')

1 row inserted.

Inserted row id: 4 (Query took 0.0370 seconds.)

INSERT INTO PATIENT (Name, Phone, Email, Address, SSN, InsuranceNumber) VALUES ('Joan Romero', '(248) 675-4007', 'jr@gmail.com', '666-4366 Lacinia Avenue Idaho Falls Ohio', '650-42-0943', 'XM 95 88 11 C')

1 row inserted.

Inserted row id: 5 (Query took 0.0511 seconds.)

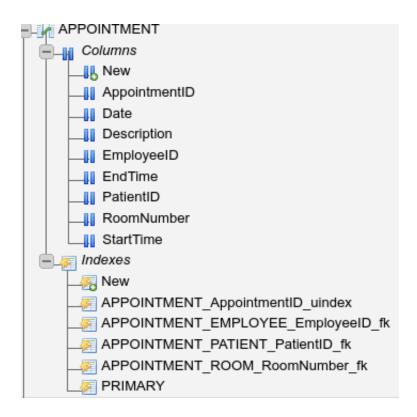
INSERT INTO PATIENT (Name, Phone, Email, Address, SSN, InsuranceNumber) VALUES ('Davis Patrick', '(939) 353-1107', 'dp@gmail.com', 'P.O. Box 147 2546 Sociosqu Rd. Bethlehem Utah', '158-74-8367', 'CX 50 09 44 B')



#### **APPOINTMENT**

```
In [ ]: CREATE TABLE APPOINTMENT
          AppointmentID INT AUTO_INCREMENT
            PRIMARY KEY,
          Date
                        DATE NULL,
          StartTime
                        TIME NULL,
          EndTime
                       TIME NULL,
          Description TEXT NULL,
          EmployeeID
                        INT NOT NULL,
          PatientID
                        INT NOT NULL,
          RoomNumber
                        INT NOT NULL,
          CONSTRAINT APPOINTMENT_AppointmentID_uindex
          UNIQUE (AppointmentID),
          CONSTRAINT APPOINTMENT_EMPLOYEE_EmployeeID_fk
          FOREIGN KEY (EmployeeID) REFERENCES EMPLOYEE (EmployeeID)
            ON UPDATE CASCADE
            ON DELETE CASCADE,
          CONSTRAINT APPOINTMENT_PATIENT_PatientID_fk
          FOREIGN KEY (PatientID) REFERENCES PATIENT (PatientID)
            ON UPDATE CASCADE
            ON DELETE CASCADE,
          CONSTRAINT APPOINTMENT_ROOM_RoomNumber_fk
          FOREIGN KEY (RoomNumber) REFERENCES ROOM (RoomNumber)
            ON UPDATE CASCADE
            ON DELETE CASCADE
        );
```

```
CREATE INDEX APPOINTMENT_EMPLOYEE_EmployeeID_fk
ON APPOINTMENT (EmployeeID);
CREATE INDEX APPOINTMENT_PATIENT_PatientID_fk
ON APPOINTMENT (PatientID);
CREATE INDEX APPOINTMENT_ROOM_RoomNumber_fk
ON APPOINTMENT (RoomNumber);
```



```
In [ ]: INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID,
                                 PatientID, RoomNumber) VALUES
          ('2018-9-10', '14:00:00', '15:00:00', 'Constitutional - NAD, has been
           generally feeling well the last couple of weeks;
           Eyes - no changes in vision, double vision, blurry vision, wears glasses;
           ENT - No congestion, changes in hearing, does not wear hearing aids;
           Skin/Breast - no rashes;
           Cardiovascular - No SOB, chest pain, heart palpitations', 3, 4, 2);
        INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID,
                                 PatientID, RoomNumber) VALUES
          ('2018-9-10', '10:00:00', '12:00:00', 'Cardiovascular: dyspnea on exertion;
           denies chest pains, palpitations, syncope, orthopnea, PND, edema;
           Respiratory: denies cough and wheezing;
           Gastrointestinal: denies jaundice;
           Genitourinary: denies incontinence, dysuria, hematuria, urinary frequency',
           1, 3, 2);
```

```
INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID,
                         PatientID, RoomNumber) VALUES
  ('2018-9-11', '16:00:00', '17:30:00', 'Constitutional: Intermittent
   chills with decreased appetite. No fevers, night sweats or weight loss;
  Eyes: No vision changes;
  ENT: No URI symptoms, mouth ulcers or dysphagia;
  Skin: Jaundice and scaly silver nonpruritic rash on right flexor
  surface of elbow', 2, 5, 3);
INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID,
                         PatientID, RoomNumber) VALUES
  ('2018-9-11', '09:30:00', '14:15:00', 'Constitutional: denies anorexia
  and weight loss;
    HEENT: denies decreased hearing blurring, diplopia, irritation,
  discharge, vision loss, eye pain,
    photophobia, ear pain or discharge, tinnitus, nasal obstruction
   or discharge, nosebleeds, sore
    throat, hoarseness, dysphagia', 4, 2, 1);
INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID,
                         PatientID, RoomNumber) VALUES
  ('2018-9-12', '14:45:00', '15:30:00', 'Cardiovascular - denies chest
  pain; denies palpitations;
    Pulmonary - denies shortness of breath, denies cough;
    Gastrointestinal - As indicated in the HPI, complains of sharp,
   epigastric abdominal pain;
    endorses constipation, denies diarrhea; endorses bloody stools;
    Genitourinary - denies dysuria; denies increased frequency or
   urgency of urination;
    Neurologic - denies numbness and tingling; denies paresthesias;
    Muskuloskeletal - endorses abdominal pain occasionally after
   throwing the football;
   denies any muscle or joint pain', 5, 1, 2);
```

Inserted row id: 1 (Query took 0.0384 seconds.)

INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID, PatientID, RoomNumber) VALUES ('2018-9-10', '14:00:00', '15:00:00', 'Constitutional - NAD, has been generally feeling well the last couple of weeks; Eyes - no changes in vision, double vision, blurry vision, wears glasses; ENT - No congestion, changes in hearing, does not wear hearing aids; Skin/Breast - no rashes; Cardiovascular - No SOB, chest pain, heart palpitations', 3, 4, 2)

1 row inserted.

Inserted row id: 2 (Query took 0.0339 seconds.)

INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID, PatientID, RoomNumber) VALUES ('2018-9-10', '10:00:00', '12:00:00', 'Cardiovascular: dyspnea on exertion; denies chest pains, palpitations, syncope, orthopnea, PND, edema; Respiratory: denies

cough and wheezing; Gastrointestinal: denies jaundice; Genitourinary: denies incontinence, dysuria, hematuria, urinary frequency', 1, 3, 2)

1 row inserted.

Inserted row id: 3 (Query took 0.1315 seconds.)

INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID, PatientID, RoomNumber) VALUES ('2018-9-11', '16:00:00', '17:30:00', 'Constitutional: Intermittent chills with decreased appetite. No fevers, night sweats or weight loss; Eyes: No vision changes; ENT: No URI symptoms, mouth ulcers or dysphagia; Skin: Jaundice and scaly silver nonpruritic rash on right flexor surface of elbow', 2, 5, 3)

1 row inserted.

Inserted row id: 4 (Query took 0.0371 seconds.)

INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID, PatientID, RoomNumber) VALUES ('2018-9-11', '09:30:00', '14:15:00', 'Constitutional: denies anorexia and weight loss; HEENT: denies decreased hearing blurring, diplopia, irritation, discharge, vision loss, eye pain, photophobia, ear pain or discharge, tinnitus, nasal obstruction or discharge, nosebleeds, sore throat, hoarseness, dysphagia', 4, 2, 1)

1 row inserted.

Inserted row id: 5 (Query took 0.0458 seconds.)

INSERT INTO APPOINTMENT (Date, StartTime, EndTime, Description, EmployeeID, PatientID, RoomNumber) VALUES ('2018-9-12', '14:45:00', '15:30:00', 'Cardiovascular – denies chest pain; denies palpitations; Pulmonary – denies shortness of breath, denies cough; Gastrointestinal – As indicated in the HPI, complains of sharp, epigastric abdominal pain; endorses constipation, denies diarrhea; endorses bloody stools; Genitourinary – denies dysuria; denies increased frequency or urgency of urination; Neurologic – denies numbness and tingling; denies paresthesias; Muskuloskeletal – endorses abdominal pain occasionally after throwing the football; denies any muscle or joint pain', 5, 1, 2)

