**First, the SQL statements for the SPECIALTY table:**

* Creating the SPECIALTY Table:

CREATE TABLE SPECIALTY(

SpecialtyNumber CHAR(10) NOT NULL,

SpecialtyName VARCHAR (40) NOT NULL,

CONSTRAINT pk\_spec PRIMARY KEY (SpecialtyNumber),

CONSTRAINT uq\_spec UNIQUE (SpecialtyNumber));

* Populating the SPECIALTY table:

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S1', 'Dermatology');

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S2', 'Psychiatry');

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S3', 'Oncology');

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S4', 'Cardiology');

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S5', 'Urology');

INSERT INTO SPECIALTY (SpecialtyNumber, SpecialtyName)

VALUES ('S6', 'Pediatrics');

* Retrieving all data from the SPECIALTY table:

SELECT \* FROM SPECIALTY;

Graphical user interface, text, application

Description automatically generated

**Second, the SQL statements for the ALLERGY table:**

* Creating the ALLERGY Table:

CREATE TABLE ALLERGY(

AllergyID CHAR(10) NOT NULL,

AllergyName VARCHAR(40) NOT NULL,

CONSTRAINT pk\_allergy PRIMARY KEY (AllergyID),

CONSTRAINT uq\_allergy UNIQUE (AllergyID)

);

* Populating the ALLERGY table:

INSERT INTO ALLERGY (AllergyID, AllergyName)

VALUES ('AL1', 'Drug');

INSERT INTO ALLERGY (AllergyID, AllergyName)

VALUES ('AL2', 'Food');

INSERT INTO ALLERGY (AllergyID, AllergyName)

VALUES ('AL3', 'Skin');

INSERT INTO ALLERGY (AllergyID, AllergyName)

VALUES ('AL4', 'Asthma');

INSERT INTO ALLERGY (AllergyID, AllergyName)

VALUES ('AL5', 'Rhinitis');

* Retrieving all data from the ALLERGY table:

SELECT \* FROM ALLERGY;

Graphical user interface, application, Word

Description automatically generated

**Third, the SQL statements for the MEDICINE table:**

* Creating the MEDICINE Table:

Create Table MEDICINE(

MedicineID CHAR(10) NOT NULL,

MedicineName VARCHAR(40) NOT NULL,

CONSTRAINT pk\_medicine PRIMARY KEY (MedicineID),

CONSTRAINT uq\_medicine UNIQUE (MedicineID));

* Populating the MEDICINE table:

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M1', 'Ativan');

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M2', 'Ibuprofen');

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M3', 'Omeprazole');

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M4', 'Metoprolol');

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M5', 'Azithromycin');

INSERT INTO MEDICINE (MedicineID, MedicineName)

VALUES ('M6', 'Codeine');

* Retrieving all data from the MEDICINE table:

SELECT \* FROM MEDICINE;

Graphical user interface, text, application

Description automatically generated

**Fourth, the SQL statements for the DOCTOR table:**

* Creating the DOCTOR Table:

CREATE TABLE DOCTOR(

DoctorID CHAR(10) NOT NULL,

Name VARCHAR(40) NOT NULL,

Phone CHAR(20) NOT NULL,

SpecialtyNumber CHAR(10) NOT NULL,

Supervisor CHAR(10),

CONSTRAINT pk\_doctor PRIMARY KEY (DoctorID),

CONSTRAINT uq\_doctor UNIQUE (DoctorID),

CONSTRAINT fk\_spec FOREIGN KEY (SpecialtyNumber)

REFERENCES Specialty(SpecialtyNumber) ON UPDATE CASCADE

);

* Populating the DOCTOR table:

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D1', 'Doctor Karen', '555-1212', 'S6', '');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D2', 'Doctor John', '555-2934', 'S2', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D3', 'Doctor Robert', '555-6723', 'S6', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D4', 'Doctor David', '555-1745', 'S4', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D5', 'Doctor Mary', '555-6565', 'S5', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D6', 'Doctor Linda', '555-4889', 'S1', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D7', 'Doctor Susan', '555-4581', 'S3', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D8', 'Doctor Zeynep', '555-7891', 'S4', 'D1');

INSERT INTO DOCTOR (DoctorID, Name, Phone, SpecialtyNumber, Supervisor) VALUES ('D9', 'Doctor Mat', '555-7791', 'S1', 'D1');

* Retrieving all data from the DOCTOR table:

SELECT \* FROM DOCTOR;

Table

Description automatically generated

**Fifth, the SQL statements for the PATIENT table:**

* Creating the PATIENT Table:

CREATE TABLE PATIENT(

PatientID CHAR(10) NOT NULL,

Name VARCHAR(40) NOT NULL,

Phone CHAR(20) NOT NULL,

Email VARCHAR(40),

Address VARCHAR(100) NOT NULL,

AddedDate DATE NOT NULL,

DoctorID CHAR(10) NOT NULL,

CONSTRAINT pk\_pat PRIMARY KEY (PatientID),

CONSTRAINT uq\_pat UNIQUE (PatientID),

CONSTRAINT fk\_doc FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID)

);

* Populating the PATIENT table:

INSERT INTO PATIENT VALUES ('P1', 'Patient Dana', '444-1212', 'P1@email.com', '123 Home St.', '2019-2-1', 'D2');

INSERT INTO PATIENT VALUES ('P2', 'Patient Harry', '444-2934', 'P2@email.com', '3435 Main St.', '2011-7-13', 'D7');

INSERT INTO PATIENT VALUES ('P3', 'Patient Karl', '444-6723', 'P3@email.com', '2176 Baker St.', '2009-5-10', 'D6');

INSERT INTO PATIENT VALUES ('P4', 'Patient Sid', '444-1745', 'P4@email.com', '176 Right St.', '2010-6-20', 'D2');

INSERT INTO PATIENT VALUES ('P5', 'Patient Marry', '444-6565', 'P5@email.com', '435 Main St.', '2014-5-18', 'D8');

INSERT INTO PATIENT VALUES ('P6', 'Patient Kim', '444-4889', 'P6@email.com', '34 Home St.', '2018-3-5', 'D6');

INSERT INTO PATIENT VALUES ('P7', 'Patient Susan', '444-4581', 'P7@email.com', '65 Water St.', '2011-9-7', 'D4');

INSERT INTO PATIENT VALUES ('P8', 'Patient Sam', '444-7891', 'P8@email.com', '23 Hill Drive', '2010-11-23', 'D3');

INSERT INTO PATIENT VALUES ('P9', 'Patient Peter', '444-7791', 'P9@email.com', '12 River St.', '2008-2-1', 'D5');

INSERT INTO PATIENT VALUES ('P10', 'Patient Nick', '123-1212', 'P10@email.com', '335 Bay St.', '2011-7-13', 'D7');

INSERT INTO PATIENT VALUES ('P11', 'Patient Kyle', '123-2934', 'P11@email.com', '216 Baker St.', '2016-5-10', 'D9');

INSERT INTO PATIENT VALUES ('P12', 'Patient Garcia', '123-6723', 'P12@email.com', '176 Right St.', '2010-6-20', 'D9');

INSERT INTO PATIENT VALUES ('P13', 'Patient Alicia', '123-1745', 'P13@email.com', '823 Left St.', '2015-5-18', 'D4');

INSERT INTO PATIENT VALUES ('P14', 'Patient Dan', '123-6565', 'P14@email.com', '534 High St.', '2018-3-15', 'D4');

* Retrieving all data from the PATIENT table:

SELECT \* FROM PATIENT;

Table

Description automatically generated

**Sixth, the SQL statements for the APPOINTMENT table:**

* Creating the APPOINTMENT Table:

CREATE TABLE APPOINTMENT(

AppointmentID CHAR(10) NOT NULL,

PatientID CHAR(10) NOT NULL,

DoctorID CHAR(10) NOT NULL,

AppointmentDate DATE NOT NULL,

BloodPressure SMALLINT NOT NULL,

Weight DECIMAL(5,2) NOT NULL,

TreatmentNotes VARCHAR(300) NOT NULL,

CONSTRAINT pk\_app PRIMARY KEY (AppointmentID),

CONSTRAINT uq\_app UNIQUE (AppointmentID),

CONSTRAINT fk\_doctor FOREIGN KEY (DoctorID) REFERENCES Doctor(DoctorID),

CONSTRAINT fk\_patient FOREIGN KEY (PatientID) REFERENCES Patient(PatientID)

);

* Populating the APPOINTMENT Table:

INSERT INTO APPOINTMENT VALUES ('A1', 'P1', 'D2', '2019-7-1', 80, 65, 'Dream to success');

INSERT INTO APPOINTMENT VALUES ('A2', 'P13', 'D4', '2019-1-4', 77, 88, 'Good heart rate');

INSERT INTO APPOINTMENT VALUES ('A3', 'P11', 'D9', '2019-3-22', 82, 95, 'Many spots');

INSERT INTO APPOINTMENT VALUES ('A4', 'P7', 'D4', '2020-2-1', 85, 74, 'Fast heart rate');

INSERT INTO APPOINTMENT VALUES ('A5', 'P9', 'D5', '2019-4-13', 75, 56, 'Reports checked');

INSERT INTO APPOINTMENT VALUES ('A6', 'P3', 'D6', '2019-11-12', 81, 96, 'Sun light spots');

INSERT INTO APPOINTMENT VALUES ('A7', 'P10', 'D7', '2020-1-29', 80, 87, 'Early treatment');

INSERT INTO APPOINTMENT VALUES ('A8', 'P9', 'D5', '2019-8-12', 86, 92, 'Much better');

INSERT INTO APPOINTMENT VALUES ('A9', 'P14', 'D4', '2019-5-18', 75, 75, 'Good heart rate');

INSERT INTO APPOINTMENT VALUES ('A10', 'P8', 'D3', '2019-11-18', 76, 79, 'New teeth');

INSERT INTO APPOINTMENT VALUES ('A11', 'P11', 'D9', '2019-6-22', 78, 71, 'Much better');

INSERT INTO APPOINTMENT VALUES ('A12', 'P2', 'D7', '2020-2-21', 82, 86, 'Early treatment');

INSERT INTO APPOINTMENT VALUES ('A13', 'P4', 'D2', '2019-8-17', 81, 101, 'Bad dreams');

INSERT INTO APPOINTMENT VALUES ('A14', 'P6', 'D6', '2019-6-27', 79, 49, 'Sun light spots');

INSERT INTO APPOINTMENT VALUES ('A15', 'P10', 'D7', '2020-7-29', 80, 83, 'Early treatment');

INSERT INTO APPOINTMENT VALUES ('A16', 'P7', 'D4', '2020-8-1', 78, 79, 'Good heart rate');

* Retrieving all data from the APPOINTMENT table:

SELECT \* FROM APPOINTMENT;

Table

Description automatically generated

**Seventh, the SQL statements for the PATIENT\_MEDICINE table:**

* Creating the PATIENT\_MEDICINE Table:

CREATE TABLE PATIENT\_MEDICINE(

AppointmentID CHAR(10) NOT NULL,

MedicineID CHAR(10) NOT NULL,

CONSTRAINT pk\_pat\_med PRIMARY KEY (AppointmentID,MedicineID),

CONSTRAINT uq\_pat\_med UNIQUE (AppointmentID,MedicineID),

CONSTRAINT fk\_appo FOREIGN KEY (AppointmentID) REFERENCES Appointment(AppointmentID),

CONSTRAINT fk\_medic FOREIGN KEY (MedicineID) REFERENCES Medicine(MedicineID)

);

* Populating the PATIENT\_MEDICINE Table:

INSERT INTO PATIENT\_MEDICINE VALUES ('A15', 'M1');

INSERT INTO PATIENT\_MEDICINE VALUES ('A2', 'M6');

INSERT INTO PATIENT\_MEDICINE VALUES ('A8', 'M3');

INSERT INTO PATIENT\_MEDICINE VALUES ('A6', 'M3');

INSERT INTO PATIENT\_MEDICINE VALUES ('A15', 'M2');

INSERT INTO PATIENT\_MEDICINE VALUES ('A10', 'M6');

INSERT INTO PATIENT\_MEDICINE VALUES ('A10', 'M2');

INSERT INTO PATIENT\_MEDICINE VALUES ('A4', 'M5');

INSERT INTO PATIENT\_MEDICINE VALUES ('A3', 'M5');

INSERT INTO PATIENT\_MEDICINE VALUES ('A1', 'M2');

* Retrieving all data from the PATIENT\_MEDICINE table:

SELECT \* FROM PATIENT\_MEDICINE;

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Description automatically generated

**Eighth, the SQL statements for the PATIENT\_ALLERGY table:**

* Creating the PATIENT\_ALLERGY Table:

CREATE TABLE PATIENT\_ALLERGY(

AllergyID CHAR(10) NOT NULL,

PatientID CHAR(10) NOT NULL,

CONSTRAINT pk\_pat\_all PRIMARY KEY (AllergyID,PatientID),

CONSTRAINT uq\_pat\_all UNIQUE (AllergyID,PatientID),

CONSTRAINT fk\_aller FOREIGN KEY (AllergyID) REFERENCES Allergy(AllergyID),

CONSTRAINT fk\_pat FOREIGN KEY (PatientID) REFERENCES Patient(PatientID)

);

* Populating the PATIENT\_ALLERGY Table:

INSERT INTO PATIENT\_ALLERGY VALUES ('AL4', 'P1');

INSERT INTO PATIENT\_ALLERGY VALUES ('AL2', 'P13');

INSERT INTO PATIENT\_ALLERGY VALUES ('AL3', 'P11');

INSERT INTO PATIENT\_ALLERGY VALUES ('AL4', 'P7');

INSERT INTO PATIENT\_ALLERGY VALUES ('AL5', 'P9');

INSERT INTO PATIENT\_ALLERGY VALUES ('AL1', 'P3');

* Retrieving all data from the PATIENT\_ALLERGY table:

SELECT \* FROM PATIENT\_ALLERGY;

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Description automatically generated