Syracuse University iSchool_IST659 M003 Fall 2015

Data Administration Concepts and Database Management

Patient Care Management Database System

Prepared by: Saurabh Jape

Version <v.02>

Instructor Name: Professor Nicholas C. Bucciarelli

Contents

CONTENTS 2

REVISIONS 3

1 PROJECT PROPOSAL 4

2 PROJECT DESIGN REPORT 6

3 PROJECT IMPLEMENTATION REPORT 11

CONCLUSION 53

Revisions

Version	Primary Author(s)	Description of Version	Date Completed
v.01	Saurabh Jape	This document contains the Project design report of the Patient Care Management Database System.	10/05/2015
v.02	Saurabh Jape	This document contains the project Implementation report of the Patient Care Management Database System.	11/15/2015

1. Project Proposal

The prospective Patient Care Management System (PCMS) is a database system that has been designed for upcoming organization to help their customers with searching and scheduling of doctor appointments, treat health related issues, track doctor's availability, querying and reporting what dosages of medications were administered to patients, by whom etc. The system will also allow the customer to search for the availability of medicines at the nearest medical store. Thus, making personal health care convenient to customers.

Over the past decade, virtually every major industry has invested heavily in computerization. Relative to a decade ago, today more Americans buy airline tickets and check in to flights online, purchase goods on the Web, and even earn degrees online in such disciplines as nursing, law and business among others. Yet, despite these advances in our society, the majority of patients are given handwritten medication prescriptions, and very few patients are able to email their physician or even schedule an appointment to see a provider without speaking to a live receptionist. Such systems have the potential to transform the health care system from a mostly paper-based industry to one that utilizes clinical and other pieces of information to assist providers in delivering higher quality of care to their patients.

Today, when customers need to schedule appointments, they have to search for availability at each hospital. Getting an appointment at a hospital is a very tedious task especially when the appointments are full. During such a situation, the customer has to call up each hospital one by one, or visit hospitals individually. Also, a similar situation arises when a customer needs medication, and he needs to search for the availability of the medicine. Thus, in such situations the proposed database management systems will be very beneficial to customers.

I would like to propose a database where different hospitals could update their appointment schedule, medical stores could update their medicine stock thereby helping patients/customers check appointment schedules and view medicine availability on the go. Further, using these statistics, the proposed systems would be able to generate various patient statistical reports every week/month for hospitals and government agencies understand health in a region and target diseases accordingly.

A healthcare database serves to replace the paper documents, file folders, and filing cabinets of old. The data is now more convenient and immediate. The PCMS database, will help customers find specific doctors availability, schedule appointments, medicine availability etc. on the basis of their input location. The database would also help the organization track doctor's availability, the reporting of what dosages of medications were administered to patients, medicine stock availability etc. Maintaining a database, thus not only helps customers with fulfilling their needs, but it also helps government organization and health monitoring agencies generate reports on the nature of disease, pattern of illness etc.

The Users of the Database would be:

- Database administrators – Maintenance, Store, Retrieve and Update Data.
- Hospital Department Administrators- Store, Update and Retrieve Data
- Doctors – Store, Update and Retrieve Data
- Patient – View and Retrieve Data
- Pharmacy - Store, Update and Retrieve Data

2. Project Design Report

The database system consists of six database tables. The database tables are Patient, Doctor, Hospital, Appointment, SlotAvailability, Prescription, PrescribedMedicine, Pharmacy, Medicine and MedicineAvailability.

The relationship between tables is shown in the ERD shown in the figure below. Each patient can select zero or many appointments. Each appointment is associated with one patient since one appointment can be given to only one patient at a time. Each hospital can have one or many doctors, while each doctor has to be associated with one hospital. Every appointment has one hospital and one doctor associated with it. Each hospital can have several appointments and each doctor can also have several appointments.

Every appointment can have only one time slot, while each time slot can be associated with only a single appointment. Every appointment can result in zero or more prescriptions being generated by the doctor. While, each prescription has to be associated with one appointment.
During every appointment, the doctor gives zero or more prescriptions. Each prescription is associated with one or more appointments.

Each prescription contains at least one prescribed medicines. Each prescribed medicine contains a medicine id. To check the status of medicine at a store, Medicine availability is used. Each medicine availability is checked using the pharmacy and medicine availability

All Primary Key Attributes consists of Integer Data Type. The Primary Key attributes for Patient, Doctor, Hospitals, Appointment, Slot, Prescription and Medicine are 12-digit unique Identification number.

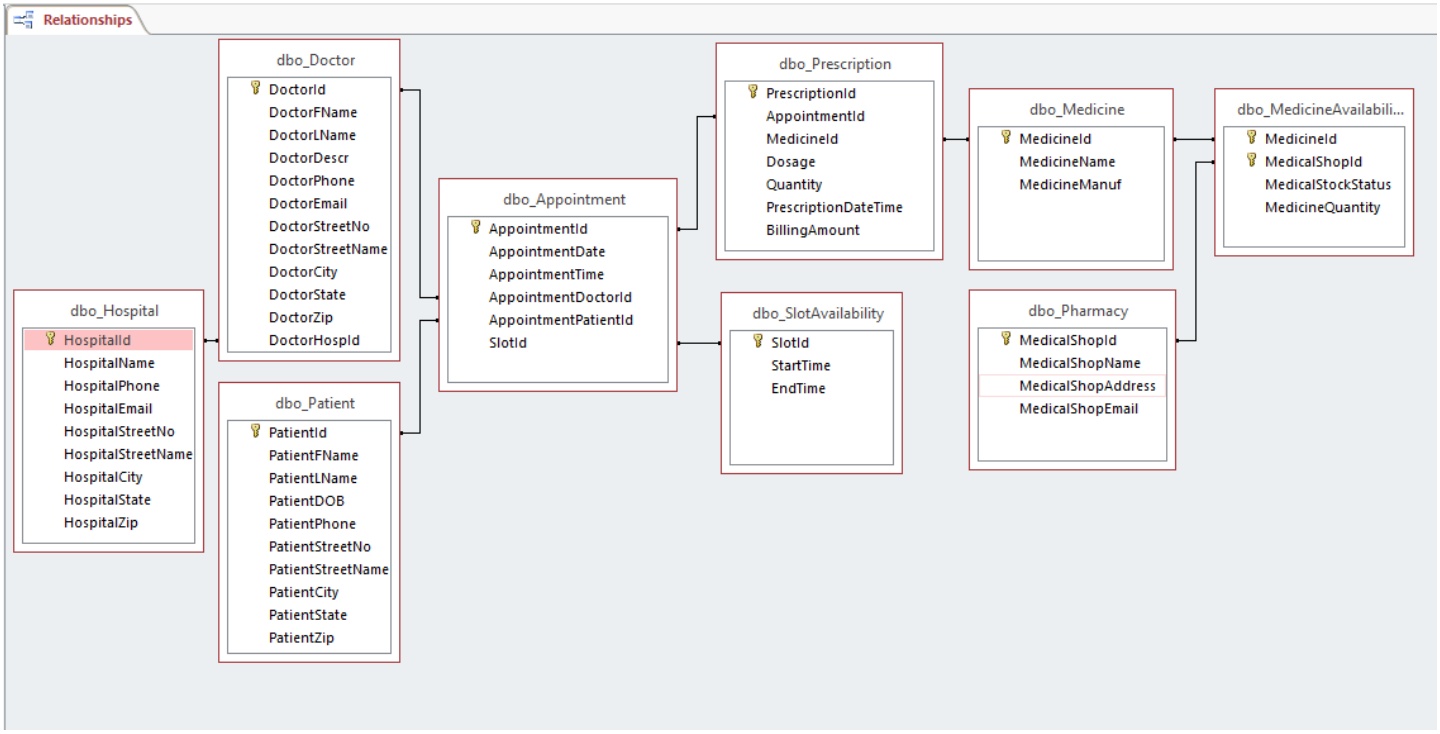
Data Dictionary, Entity and their attributes:

Sr No.	Table	Field	Attribute	Data Dictionary	Keys	Null Type
1	PATIENT			List of Patients who come for treatment		
		PatientId	INT(12)	Patient Identification Number	Primary Key	Not Null
		PatientFName	VARCHAR	Name of the patient		
		PatientLName	VARCHAR	Last name of the patient		
		PatientDOB	INT(5)	Date of birth of the patient		
		PatientPhone	VARCHAR	Phone Number of the patient		
		PatientStreetNo	VARCHAR	Street Number of the patient Address		
		PatientStreetName	VARCHAR	Street Name of the patient Address		
		PatientCity	VARCHAR	City of the patient Address		
		PatientState	VARCHAR	State of the patient Address		
		PatientZip	VARCHAR	Zipcode of the patient Address		
2	HOSPITAL			List of hospitals where patients come for treatment		
		HospitalId	INT(12)	Hospital Identification Number	Primary Key	Not Null
		HospitalName	VARCHAR	Name of the hospital		
		HospitalPhone	VARCHAR	Phone Number of the hospital		
		HospitalEmail	VARCHAR	Email Address of the hospital		
		HospitalStreetNo	VARCHAR	Street Number of the hospital Address		
		HospitalStreetName	VARCHAR	Street Name of the hospital Address		
		HospitalCity	VARCHAR	City of the hospital Address		
		HospitalState	VARCHAR	State of the hospital Address		
		HospitalZip	VARCHAR	Zipcode of the hospital Address		
3	DOCTOR			Doctor who treats the patient		
		DoctorId	INT(12)	Doctor Identification Number	Primary Key	Not Null
		DoctorFName	VARCHAR	First Name of the Doctor		
		DoctorLName	VARCHAR	Last Name of the Doctor		
		DoctorDescr	VARCHAR	Description of the Doctor(Degree)		
		DoctorPhone	VARCHAR	Phone Number of the Doctor		
		DoctorEmail	VARCHAR	Email Address of the Doctor		
		DoctorStreetNo	VARCHAR	Street Number of the doctor Address		
		DoctorStreetName	VARCHAR	Street Name of the doctor Address		
		DoctorCity	VARCHAR	City of the doctor Address		
		DcotorState	VARCHAR	State of the doctor Address		
		DoctorZip	VARCHAR	Zipcode of the doctor Address		
		DoctorHospId	INT(12)	Hospital Identification Number	Foreign Key	Not Null
4	APPOINTMENT			Appointment given to the customer		
		AppointmentId	INT(12)	Primary Key/Unique Identifier of the Appointment	Primary Key	Not Null
		AppointmentDate	DATETIME	Date of the Appointment		
		AppointmentTime	DATETIME	Time of the appointment		
		AppointmentDoctorId	INT(12)	Doctor Identification Number	Foreign Key	Not Null
		AppointmentPatientId	INT(12)	Patient Identification Number	Foreign Key	Not Null
		SlotId	INT(12)	Slot Identification Number	Foreign Key	Not Null
5	SLOT AVAILABILITY			Slot given to patient		
		SlotId	INT(12)	Slot Identification Number	Primary Key	Not Null
		StartTime	DATETIME	Starting time of the appointment slot		
		EndTime	DATETIME	Ending time of the appointment slot		
6	PRESCRIPTION			Prescription given to a patient		
		PrescriptionId	INT(12)	Prescription Identification Number	Primary Key	Not Null
		AppointmentId	INT(12)	Appointment Identification Number	Foreign Key	Not Null
		MedicineId	INT(12)	Medicine Identification Number	Foreign Key	Not Null
		Dosage	VARCHAR	Dosage of the medicine		
		Quantity	INT(12)	Quantity of medicine		
		PrescriptionDateTime	VARCHAR	Date and Time of the prescription		
		BillingAmount	VARCHAR	Billing Amount of the prescription		

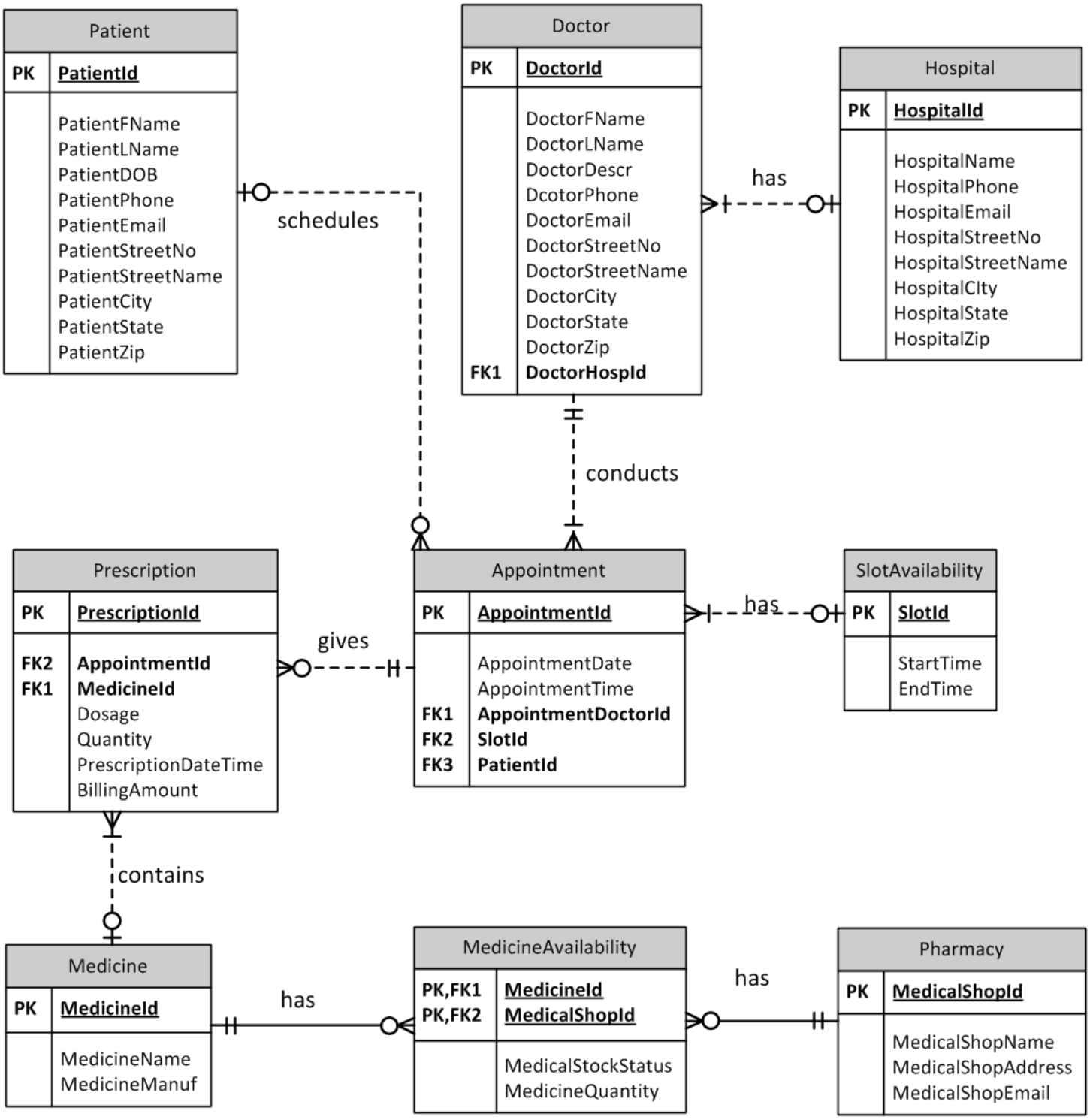
Data Dictionary, Entity and their attributes(contd)

Sr No.	Table	Field	Attribute	Data Dictionary	Keys	Null Type
7	PHARMACY			Pharmacy details where medicines are provided		
		MedicalShopId	INT(12)	Medical Shop Identification Number	Primary Key	Not Null
		MedicalShopName	VARCHAR	Name of the Pharmacy		
		MedicalShopAddress	VARCHAR	Address of the pharmacy		
		MedicalShopEmail	VARCHAR	Email Address of the Pharmacy		
8	MEDICINE			Medicine details		
		MedicineId	INT(12)	Medicine Identification Number	Primary Key	Not Null
		MedicineName	VARCHAR	Name of the Medicine		
		MedicineManuf	VARCHAR	Manufacturer of the Medicine		
9	MEDICINE AVAILABIILTY			Availability of the medicines at the pharmacy		
		MedicineId	INT(12)	Medicine Identification Number	Primary Key, Foreign Key	Not Null
		MedicalShopId	INT(12)	Medical Shop Identification Number	Primary Key, Foreign Key	Not Null
		MedicineStockStatus	VARCHAR	Status of the medicine		
		MedicineQuantity	INT(12)	Quantity of the medicine		

Table Relationship Structure



ENTITY RELATIONSHIP DIAGRAM



BUSINESS RULES:

1. A customer/patient would have to register with his email address for the first time. This would be followed by a two-step authentication. Once the user is registered he/she would be able to start using the system.

2. Hospital would have to register themselves and complete their verification as well. Once registered they would be able to update the appointment data as and when appointments are filled by patients.

3. Medical stores would have to register themselves and complete their verification. Once registered they would be able to update the medicine inventory data as and when stocks change.

4. One doctor can treat more than one patient, but can give only one appointment slot to one patient at a time.

5. Each appointment corresponds to only one time slot, one doctor and one patient.

6. Each hospital can have 1 or more doctors.

7. Database would require periodic updates.

MAJOR DATA QUESTIONS:

- What are the appointment schedules available?
- Is a particular medicine available at a medical store?
- Is there a specific doctor available that a patient needs to meet?
- What dosage of medicines are given on a periodic basis?
- Is there a pattern of similar types of medicines being given?
- Does the pattern help in determining the health of a region?
- Which medicine gets over faster compared to others?
- Which days are busier in terms of patients visiting the doctor than others?
- Is there an improvement in health of a patient over a period of time?

3. Project Implementation Report

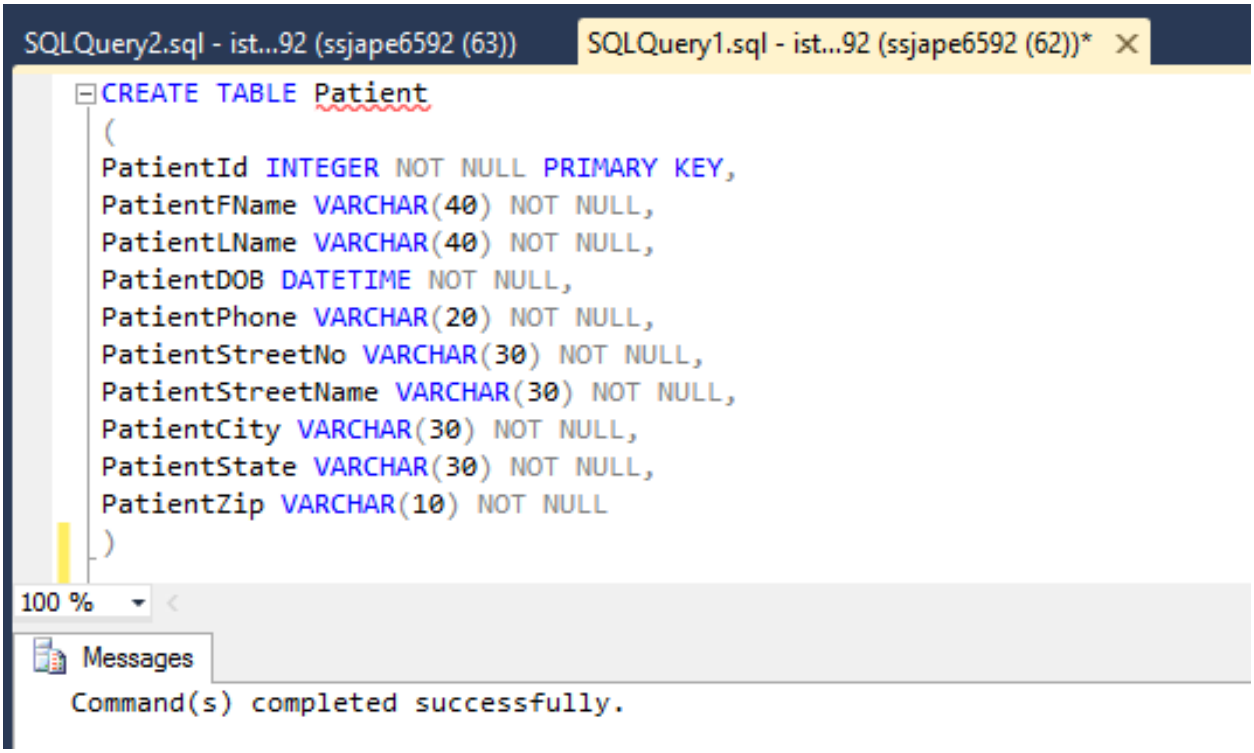
DATABASE INFRASTRUCTURE:

The Patient Care Database system is built on a client-server model. SQL Server is used as the database and MS Access-2013 is used as the interface design tool as the front end.

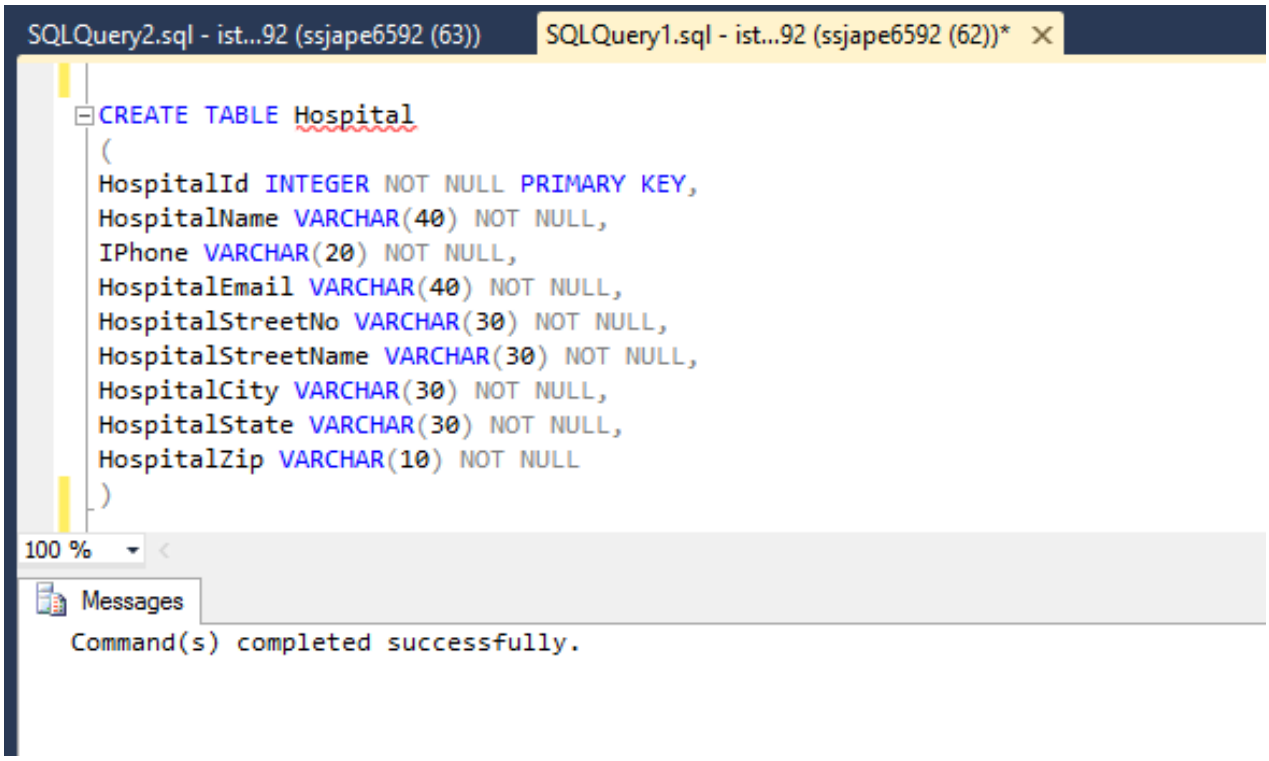
Data is inserted, deleted, updated and retrieved from SQL server database. Access forms are used at the front end. Reports and user based forms are generated using Access forms.

SQL SCRIPTS FOR CREATING TABLES:

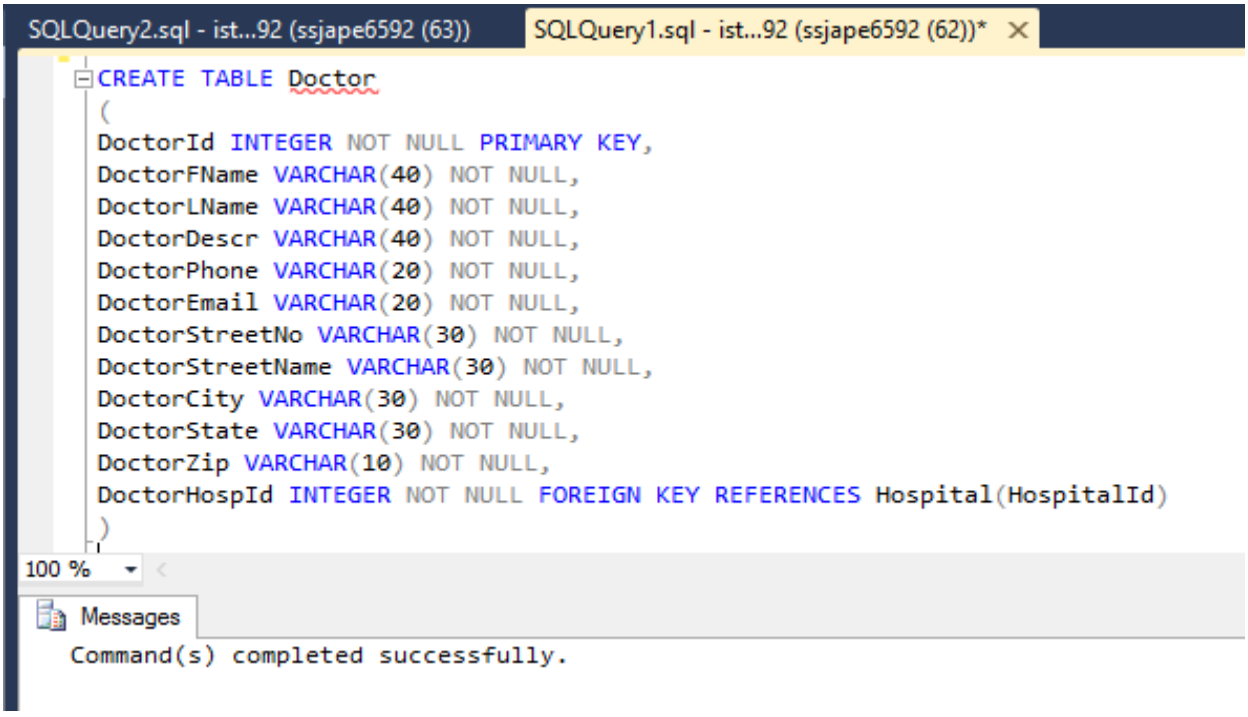
1) Creating Patient Table:



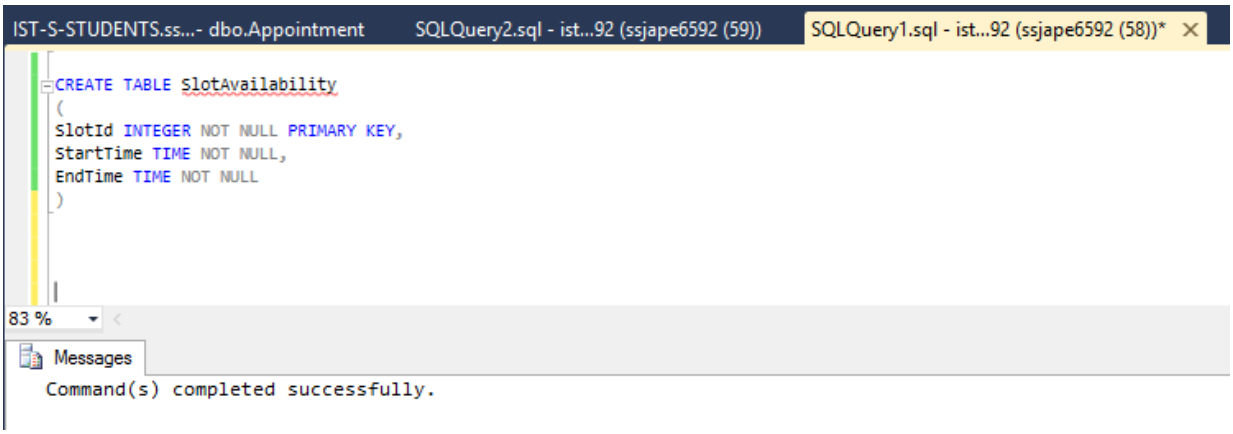
2) Creating Hospital Table



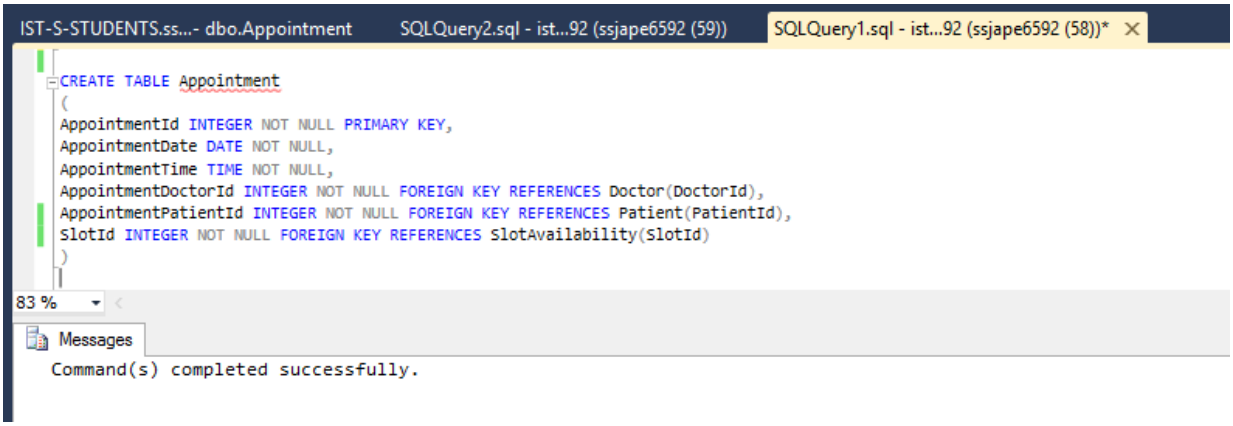
3) Creating Doctor Table



4) Creating SlotAvailability Table

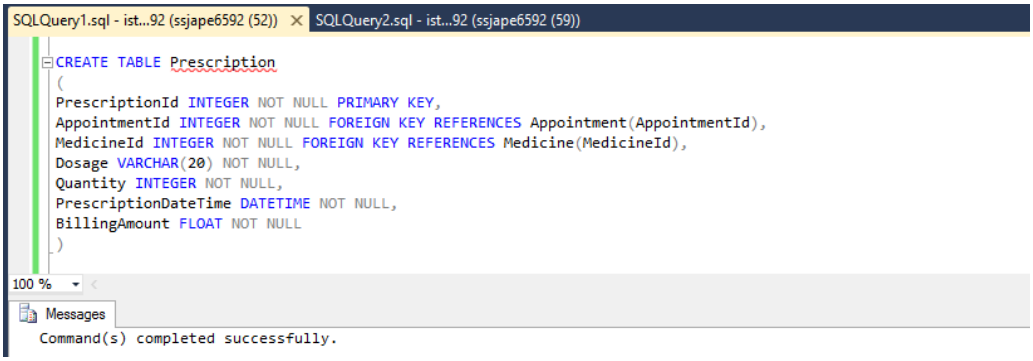


5) Creating Appointment Table

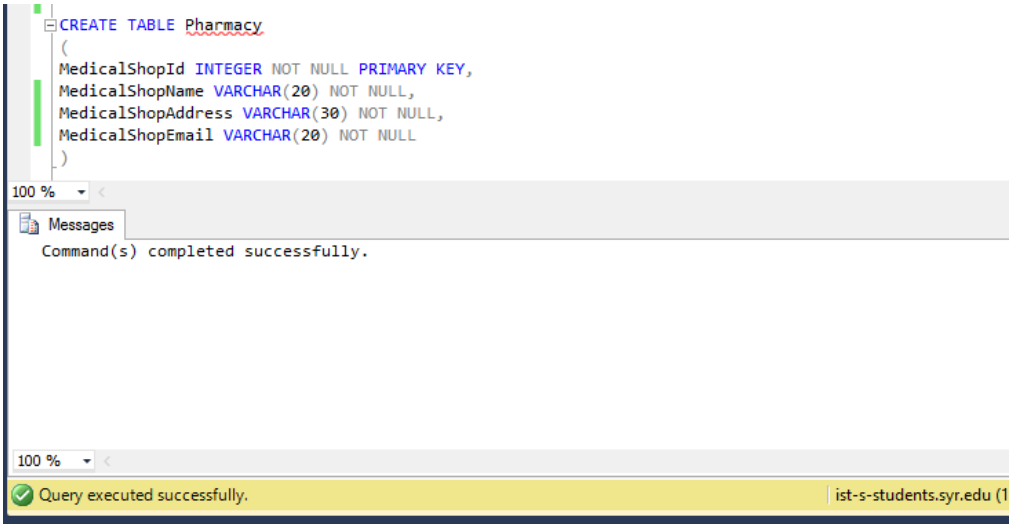


6) Creating Medicine Table

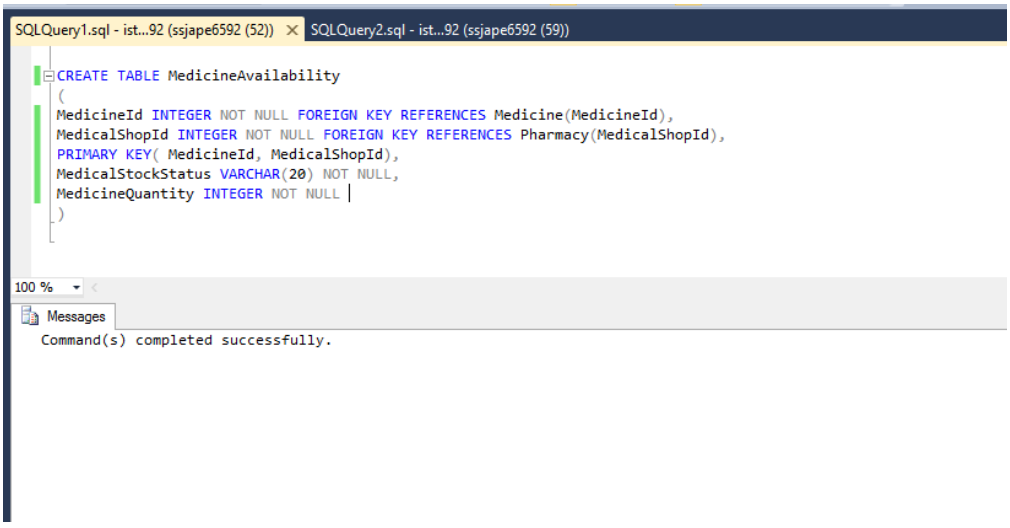
7) Creating Prescription Table



8) Creating Pharmacy Table



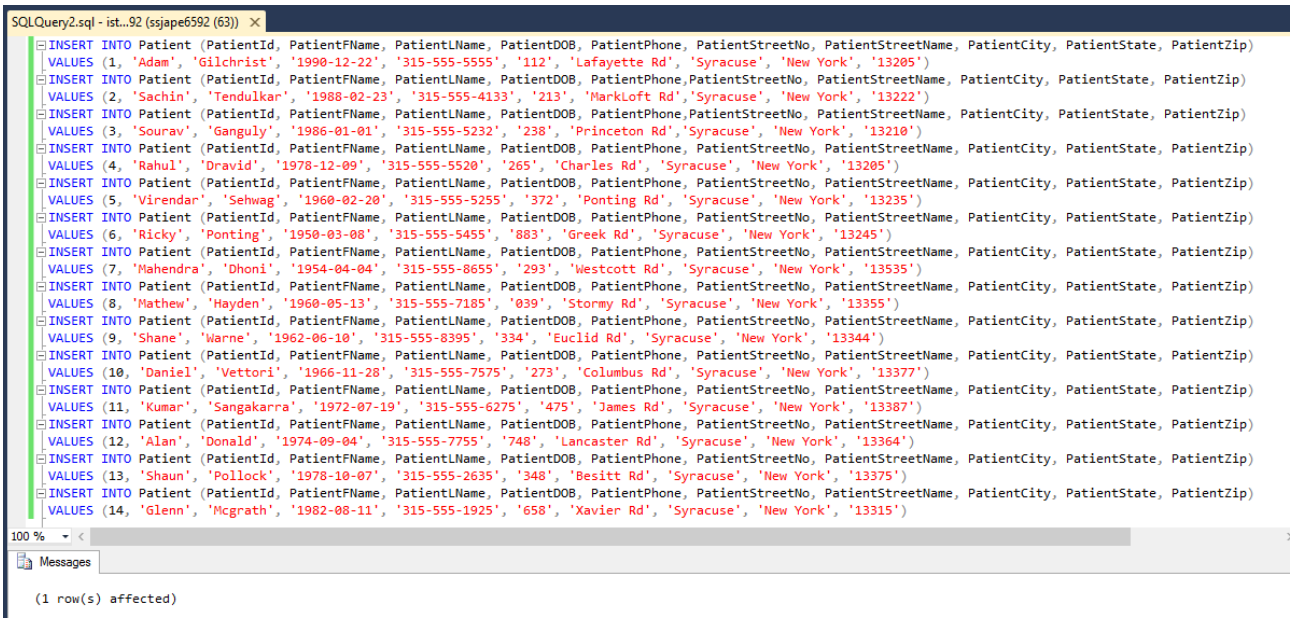
9) Creating Medicine Availability Table

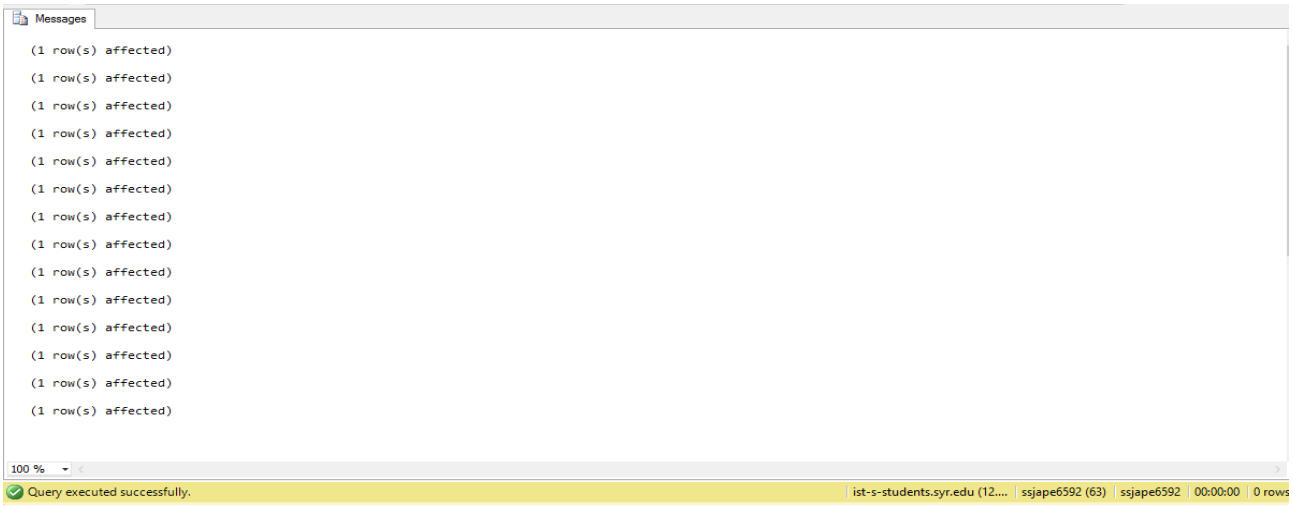


SQL SCRIPTS TO INSERT SAMPLE DATA:

a) Inserting data into Patient Table:

```
/*PATIENT DATA*/
```





b) Inserting data into Hospital Table:

```
/*HOSPITAL DATA*/
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (1, 'Community-General Foundation', '315-492-5079', '03', 'Broad Road', 'Syracuse', 'NY', '13217', 'community@gfoundation.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (2, 'Boce Onondaga Cortland Madison', '315-426-9439', '317', 'E Jefferson Street', 'Syracuse', 'NY', '13202', 'community@boces.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (3, 'Crouse Hospital', '315-470-7447', '600', 'E Genesee Street', 'Syracuse', 'NY', '13202', 'hosptial@crouse.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (4, 'Upstate University Hospital', '315-492-5573', '132', 'University Street', 'Syracuse', 'NY', '13202', 'upstate@su.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (5, 'Aurora Hospital', '315-364-3388', '18', 'Wells Street', 'Syracuse', 'NY', '13201', 'hosptial@aurora.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (6, 'St Josephs Hospital', '315-448-5040', '206', 'Prospect Ave', 'Syracuse', 'NY', '13203', 'hosptial@joseph.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (7, 'American Red Cross', '315-234-2200', '220', 'Herald Pl', 'Syracuse', 'NY', '13202', 'hosptial@redamerican.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (8, 'Arise Hospital', '315-472-3171', '635', 'James Street', 'Syracuse', 'NY', '13203', 'hosptial@arise.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (9, 'Upstate Stroke Hospital', '315-464-5252', '750', 'East Adams UHC', 'Syracuse', 'NY', '13210', 'hosptial@upstate.com')
INSERT INTO Hospital (HospitalId, HospitalName, HospitalPhone, HospitalStreetNo, HospitalStreetName, HospitalCity, HospitalState, HospitalZip, HospitalEmail)
VALUES (10, 'Family Medicene Clinic', '315-464-4686', '475', 'Irving Ave', 'Syracuse', 'NY', '13210', 'hosptial@medclinic.com')
```

```
(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)
```

c) Inserting data into Doctor Table:

```
/*DOCTOR DATA*/
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (1, 'Anil','George','Cardiologist', '315-492-5139', 'anilg@foundation.com', '005', 'Broad Road', 'Syracuse', 'NY', '13217',1)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (2, 'Jeff','Norman','Dermatologist', '315-233-4133', 'jeffnorman@boces.com', '235', 'Westcott Road', 'Syracuse', 'NY', '13222',2)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (3, 'Ram','Caprio','Gynecologist', '315-374-7583', 'ramcaprio@crouse.com', '123', 'Genesse Street', 'Syracuse', 'NY', '13123',3)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (4, 'Mark','Kemp','Cardiology', '315-212-5362', 'markkemp@su.com', '234', 'Adam Road', 'Syracuse', 'NY', '13213',4)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (5, 'Art','Rodney','Orthopedist', '315-847-8483', 'artrodney@aurora.com', '235', 'Euclid Ave', 'Syracuse', 'NY', '13210',5)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (6, 'George','Marsh','Cardiology', '315-847-4384', 'georgemar@jose.com', '055', 'Besitt Road', 'Syracuse', 'NY', '13223',6)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (7, 'Matt','Hardy','Surgeon', '315-992-8823',  'matthardy@redam.com','043', 'Westcott Road', 'Syracuse', 'NY', '13220',7)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (8, 'Mark','Antony','Psychiatrist', '315-382-6923', 'markantony@arise.com', '221', 'Irving Ave', 'Syracuse', 'NY', '13229',8)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (9, 'Andy','Bichel','Pathologist', '315-872-4874', 'andyb@upstate.com', '567', 'James Street', 'Syracuse', 'NY', '13225',9)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (10, 'Wayne','Boucher','Surgeon', '315-672-9284', 'wayneb@mclinic.com', '332', 'Prospect Ave', 'Syracuse', 'NY', '13211',10)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (11, 'Ron','Matthew','Pediatrician', '315-842-2738', 'ronmatt@crouse.com', '012', 'Wells Ave', 'Syracuse', 'NY', '13210',3)
INSERT INTO Doctor(DoctorId, DoctorFName, DoctorLName, DoctorDescr, DoctorPhone, DoctorEmail, DoctorStreetNo, DoctorStreetName, DoctorCity, DoctorState, DoctorZip, DoctorHos
VALUES (12, 'Rob','Anderson','Dermatologist', '315-949-2388', 'robanders@boces.com', '883', 'Univ Ave', 'Syracuse', 'NY', '13212',2)
```

```
(1 row(s) affected)
```

```
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
(1 row(s) affected)
```

100 %

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (59) | ssjape6592 | 00:00:00 | 0 rows

d) Inserting data into Slot Table:

```
/*SLOT DATA*/
```

IST-S-STUDENTS.ss...- dbo.Appointment | SQLQuery2.sql - ist...92 (ssjape6592 (59))

```
/*APPOINTMENT DATA*/
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (1, '10:00:00.000','10:30:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (2, '10:30:00.000','11:00:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (3, '11:00:00.000','11:30:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (4, '11:30:00.000','12:00:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (5, '12:00:00.000','12:30:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (6, '17:00:00.000','17:30:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (7, '17:30:00.000','18:00:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (8, '18:00:00.000','18:30:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (9, '18:30:00.000','19:00:00.000')
INSERT INTO SlotAvailability(SlotId, StartTime, EndTime)
VALUES (10, '19:00:00.000','19:30:00.000')
```

100 %

Messages

```
(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)
```

e) Inserting data into Appointment Table:

```
/*APPOINTMENT DATA*/
```

SQLQuery1.sql - ist...92 (ssjape6592 (52)) SQLQuery2.sql - ist...92 (ssjape6592 (59))

```
/*APPOINTMENT DATA*/
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (1, '2015-11-24', '10:00:00.000', 1, 1, 1)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (2, '2015-11-24', '11:00:00.000', 2, 2, 3)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (3, '2015-11-24', '12:00:00.000', 3, 3, 5)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (4, '2015-11-24', '17:00:00.000', 3, 4, 6)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (5, '2015-11-24', '18:00:00.000', 4, 6, 8)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (6, '2015-11-25', '10:00:00.000', 8, 7, 1)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (7, '2015-11-25', '11:00:00.000', 5, 5, 3)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (8, '2015-11-25', '12:00:00.000', 9, 7, 5)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (9, '2015-11-26', '10:00:00.000', 5, 8, 1)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (10, '2015-11-26', '11:00:00.000', 7, 10, 3)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (11, '2015-11-26', '12:00:00.000', 6, 11, 5)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (12, '2015-11-26', '17:00:00.000', 5, 12, 6)
```

SQLQuery1.sql - ist...92 (ssjape6592 (52)) SQLQuery2.sql - ist...92 (ssjape6592 (59))

```
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (13, '2015-11-26', '18:00:00.000', 8, 2, 8)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (14, '2015-11-27', '10:00:00.000', 9, 4, 1)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (15, '2015-11-27', '11:00:00.000', 12, 6, 3)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (16, '2015-11-27', '17:00:00.000', 10, 5, 6)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (17, '2015-11-27', '18:00:00.000', 11, 8, 8)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (18, '2015-11-27', '19:00:00.000', 12, 12, 10)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (19, '2015-11-28', '12:00:00.000', 9, 11, 5)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (20, '2015-11-28', '17:00:00.000', 5, 9, 6)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (21, '2015-11-28', '18:00:00.000', 7, 8, 8)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (22, '2015-11-28', '18:30:00.000', 3, 9, 9)
INSERT INTO Appointment(AppointmentId, AppointmentDate, AppointmentTime, AppointmentDoctorId, AppointmentPatientId, SlotId)
VALUES (23, '2015-11-28', '19:00:00.000', 4, 10, 10)
```

100 %

Messages

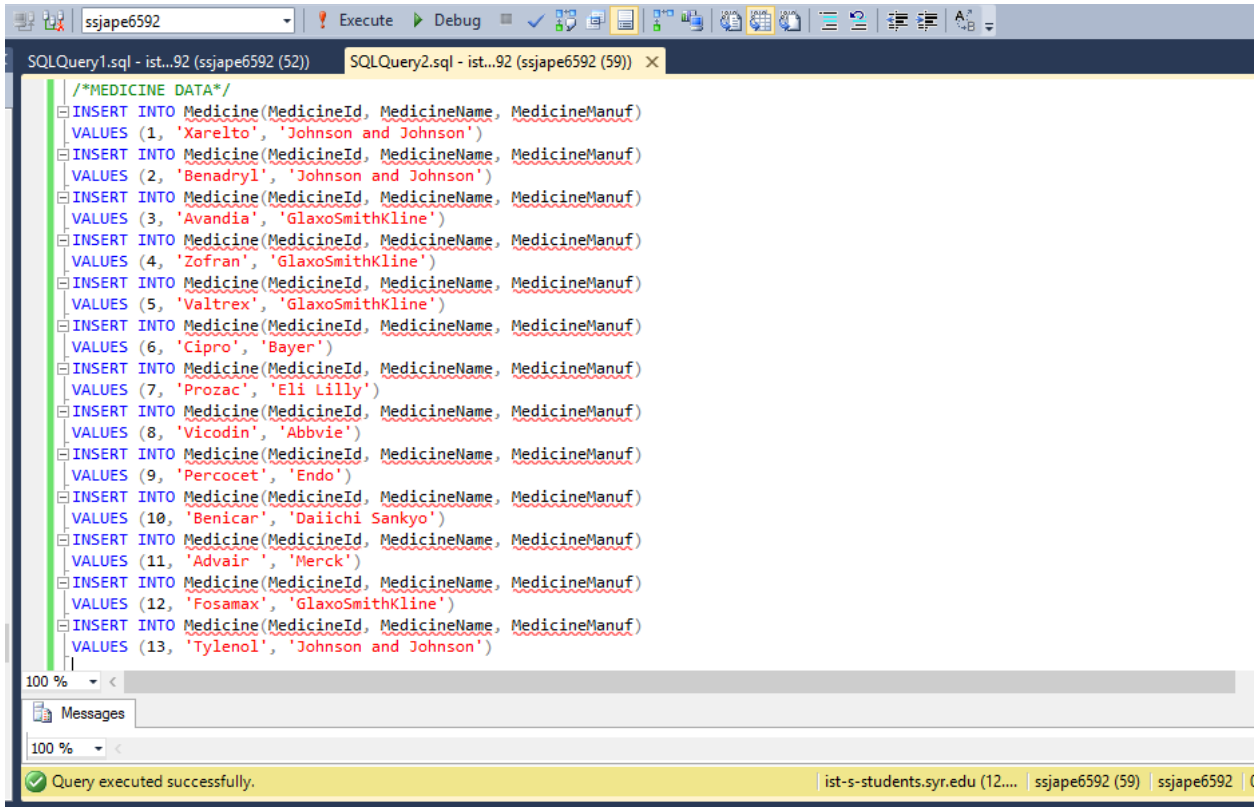
```
(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)
```

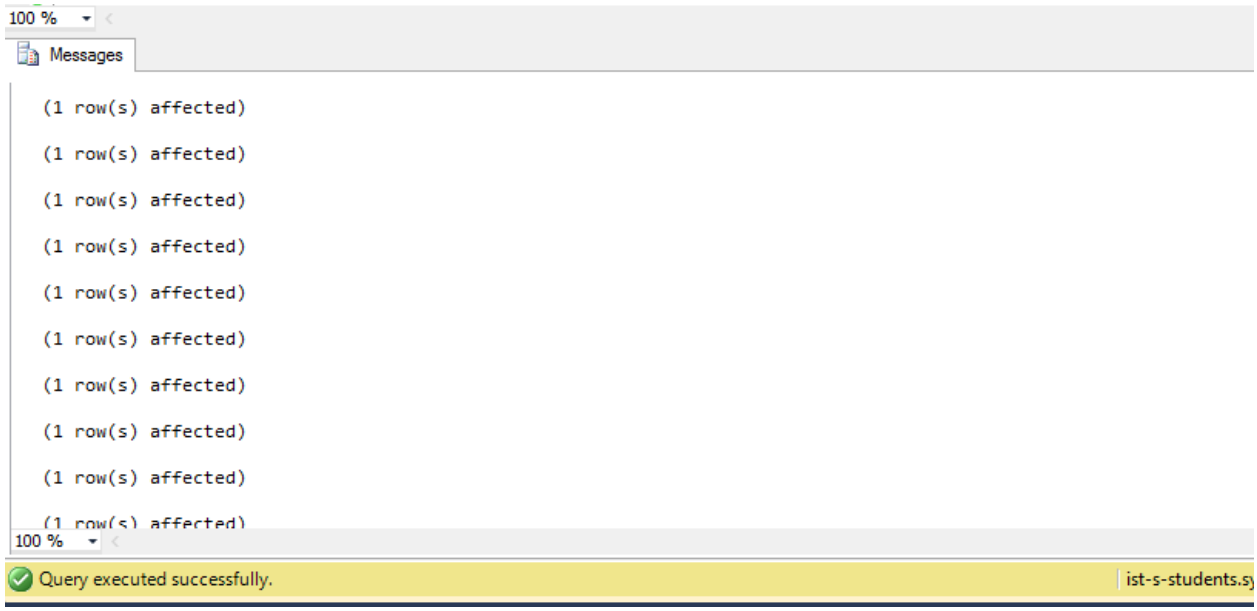
100 %

Query executed successfully. ist-s-students.syr.edu (12.... ssjape6592 (59) ssjape6592

f) Inserting data into Medicine Table:

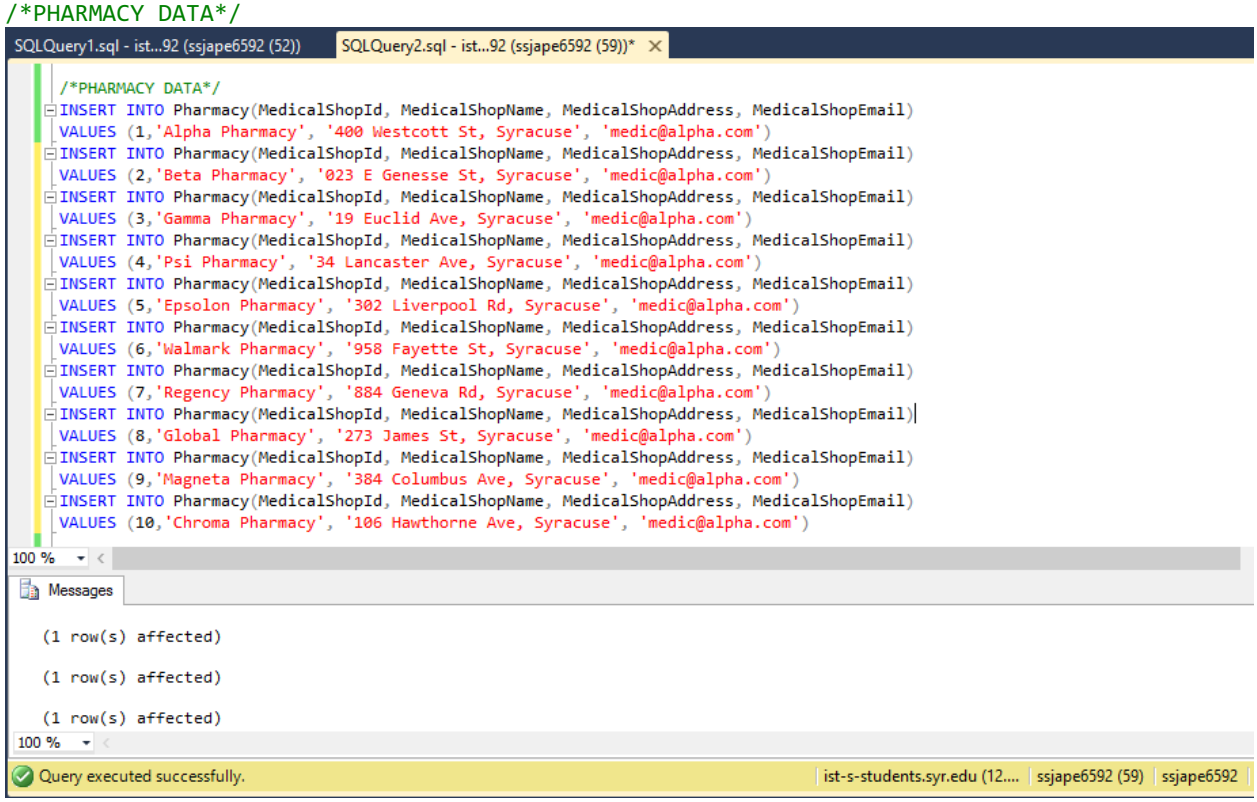
```
/*MEDICINE DATA*/
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (1, 'Xarelto', 'Johnson and Johnson')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (2, 'Benadryl', 'Johnson and Johnson')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (3, 'Avandia', 'GlaxoSmithKline')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (4, 'Zofran', 'GlaxoSmithKline')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (5, 'Valtrex', 'GlaxoSmithKline')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (6, 'Cipro', 'Bayer')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (7, 'Prozac', 'Eli Lilly')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (8, 'Vicodin', 'Abbvie')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (9, 'Percocet', 'Endo')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (10, 'Benicar', 'Daiichi Sankyo')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (11, 'Advair ', 'Merck')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (12, 'Fosamax', 'GlaxoSmithKline')
INSERT INTO Medicine(MedicineId, MedicineName, MedicineManuf)
VALUES (13, 'Tylenol', 'Johnson and Johnson')
```





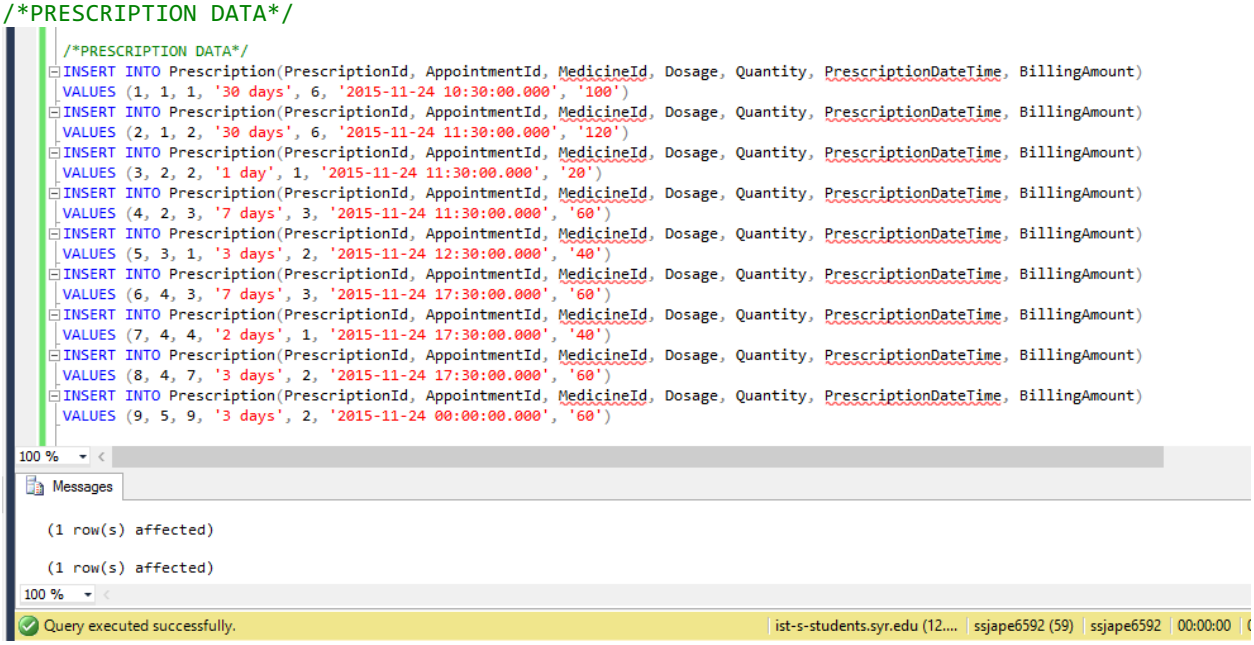
g) Inserting data into Pharmacy Table:

```
/*PHARMACY DATA*/
```



h) Inserting data into Prescription Table:

```
/*PRESCRIPTION DATA*/
```



i) Inserting data into Medicine Availability Table:

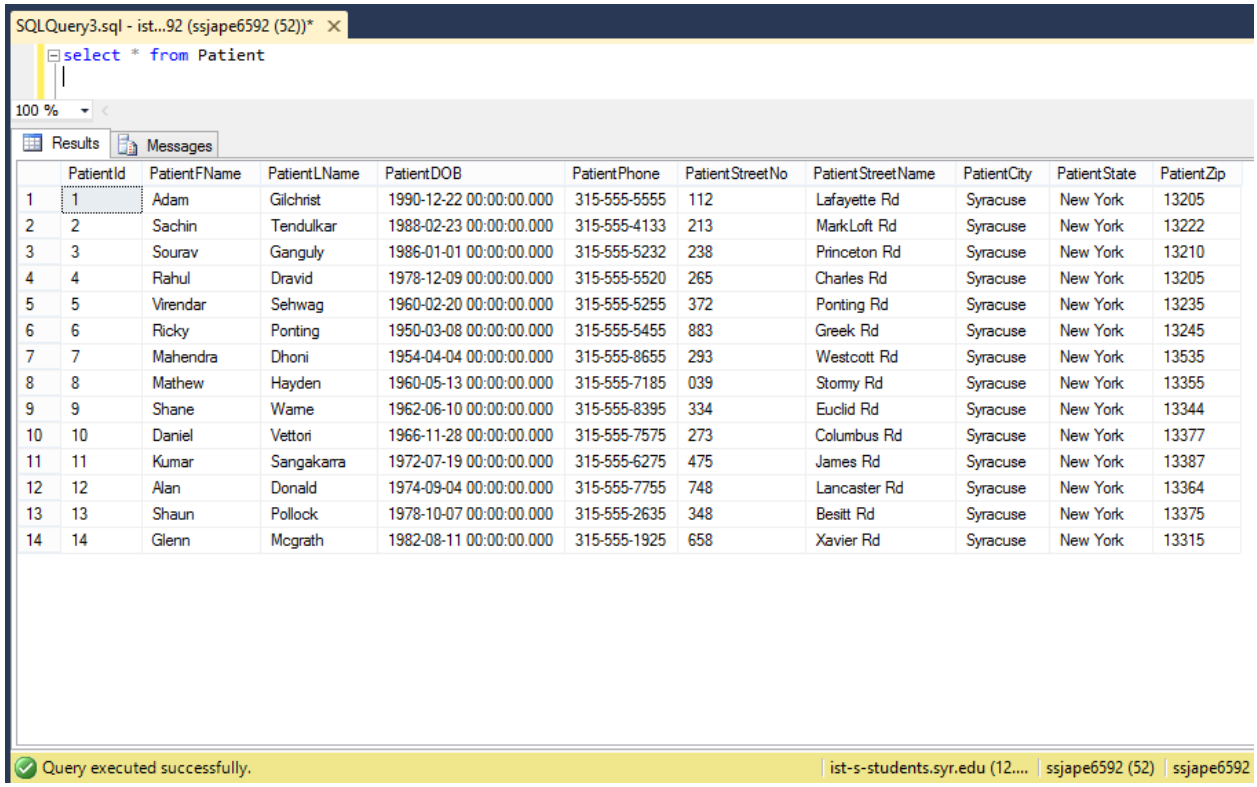
```
/*MEDICINE AVAILABILITY DATA*/
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (1,1, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (1,2, 'Not Available', '0')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (1,3, 'Available', '10')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (2,1, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (2,4, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (3,5, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (4,4, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (4,6, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (4,8, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (5,5, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (6,4, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (6,2, 'Not Available', '0')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (7,6, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (8,3, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (9,5, 'Not Available', '0')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (9,7, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (10,3, 'Available', '30')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (10,5, 'Available', '60')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (10,8, 'Available', '40')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (10,10, 'Not Available', '0')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (11,10, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (11,8, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (12,10, 'Available', '1')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (12,4, 'Available', '7')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (13,5, 'Available', '20')
INSERT INTO MedicineAvailability(MedicineId, MedicalShopId, MedicalStockStatus, MedicineQuantity)
VALUES (13,8, 'Not Available', '0')
```

```
(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)

(1 row(s) affected)
```

Query executed successfully.

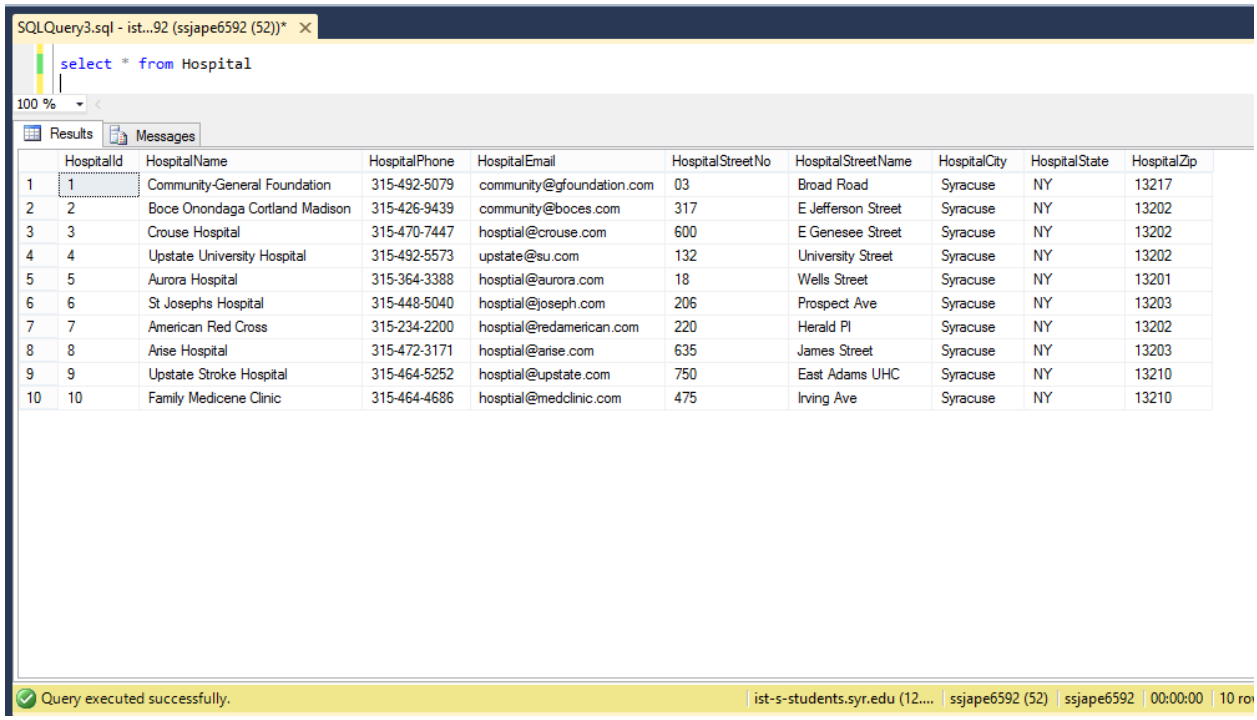
SQL SCRIPTS TO VIEW EACH TABLE:

a) Patient Table:



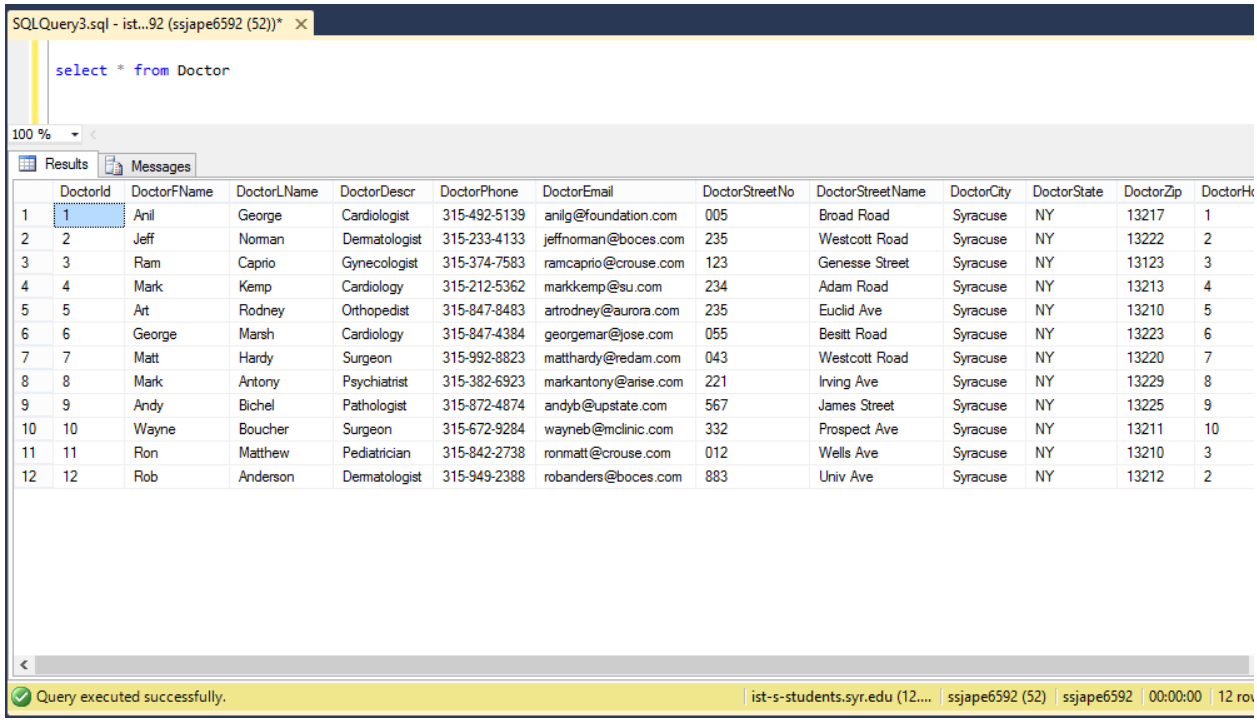
	PatientId	PatientFName	PatientLName	PatientDOB	PatientPhone	PatientStreetNo	PatientStreetName	PatientCity	PatientState	PatientZip
1	1	Adam	Gilchrist	1990-12-22 00:00:00.000	315-555-5555	112	Lafayette Rd	Syracuse	New York	13205
2	2	Sachin	Tendulkar	1988-02-23 00:00:00.000	315-555-4133	213	MarkLoft Rd	Syracuse	New York	13222
3	3	Sourav	Ganguly	1986-01-01 00:00:00.000	315-555-5232	238	Princeton Rd	Syracuse	New York	13210
4	4	Rahul	Dravid	1978-12-09 00:00:00.000	315-555-5520	265	Charles Rd	Syracuse	New York	13205
5	5	Virendar	Sehwag	1960-02-20 00:00:00.000	315-555-5255	372	Ponting Rd	Syracuse	New York	13235
6	6	Ricky	Ponting	1950-03-08 00:00:00.000	315-555-5455	883	Greek Rd	Syracuse	New York	13245
7	7	Mahendra	Dhoni	1954-04-04 00:00:00.000	315-555-8655	293	Westcott Rd	Syracuse	New York	13535
8	8	Mathew	Hayden	1960-05-13 00:00:00.000	315-555-7185	039	Stormy Rd	Syracuse	New York	13355
9	9	Shane	Warne	1962-06-10 00:00:00.000	315-555-8395	334	Euclid Rd	Syracuse	New York	13344
10	10	Daniel	Vettori	1966-11-28 00:00:00.000	315-555-7575	273	Columbus Rd	Syracuse	New York	13377
11	11	Kumar	Sangakarra	1972-07-19 00:00:00.000	315-555-6275	475	James Rd	Syracuse	New York	13387
12	12	Alan	Donald	1974-09-04 00:00:00.000	315-555-7755	748	Lancaster Rd	Syracuse	New York	13364
13	13	Shaun	Pollock	1978-10-07 00:00:00.000	315-555-2635	348	Besitt Rd	Syracuse	New York	13375
14	14	Glenn	Mcgrath	1982-08-11 00:00:00.000	315-555-1925	658	Xavier Rd	Syracuse	New York	13315

b) Hospital Table:



	HospitalId	HospitalName	HospitalPhone	HospitalEmail	HospitalStreetNo	HospitalStreetName	HospitalCity	HospitalState	HospitalZip
1	1	Community-General Foundation	315-492-5079	community@gfoundation.com	03	Broad Road	Syracuse	NY	13217
2	2	Boce Onondaga Cortland Madison	315-426-9439	community@boces.com	317	E Jefferson Street	Syracuse	NY	13202
3	3	Crouse Hospital	315-470-7447	hosptial@crouse.com	600	E Genesee Street	Syracuse	NY	13202
4	4	Upstate University Hospital	315-492-5573	upstate@su.com	132	University Street	Syracuse	NY	13202
5	5	Aurora Hospital	315-364-3388	hosptial@aurora.com	18	Wells Street	Syracuse	NY	13201
6	6	St Josephs Hospital	315-448-5040	hosptial@joseph.com	206	Prospect Ave	Syracuse	NY	13203
7	7	American Red Cross	315-234-2200	hosptial@redamerican.com	220	Herald Pl	Syracuse	NY	13202
8	8	Arise Hospital	315-472-3171	hosptial@arise.com	635	James Street	Syracuse	NY	13203
9	9	Upstate Stroke Hospital	315-464-5252	hosptial@upstate.com	750	East Adams UHC	Syracuse	NY	13210
10	10	Family Medicene Clinic	315-464-4686	hosptial@medclinic.com	475	Irving Ave	Syracuse	NY	13210

c) Doctor Table:

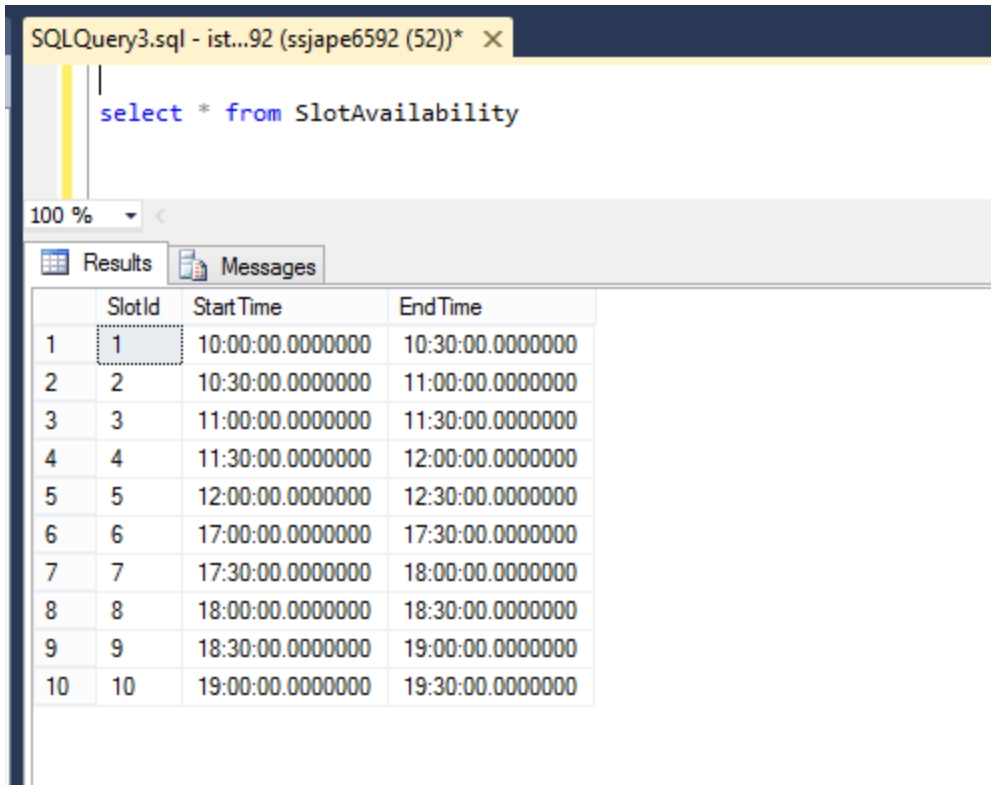


```
select * from Doctor
```

	DoctorId	DoctorFName	DoctorLName	DoctorDescr	DoctorPhone	DoctorEmail	DoctorStreetNo	DoctorStreetName	DoctorCity	DoctorState	DoctorZip	DoctorH
1	1	Anil	George	Cardiologist	315-492-5139	anilg@foundation.com	005	Broad Road	Syracuse	NY	13217	1
2	2	Jeff	Norman	Dermatologist	315-233-4133	jeffnorman@boces.com	235	Westcott Road	Syracuse	NY	13222	2
3	3	Ram	Caprio	Gynecologist	315-374-7583	ramcaprio@crouse.com	123	Genesse Street	Syracuse	NY	13123	3
4	4	Mark	Kemp	Cardiology	315-212-5362	markkemp@su.com	234	Adam Road	Syracuse	NY	13213	4
5	5	Art	Rodney	Orthopedist	315-847-8483	artrodney@aurora.com	235	Euclid Ave	Syracuse	NY	13210	5
6	6	George	Marsh	Cardiology	315-847-4384	georgemar@jose.com	055	Besitt Road	Syracuse	NY	13223	6
7	7	Matt	Hardy	Surgeon	315-992-8823	matthardy@redam.com	043	Westcott Road	Syracuse	NY	13220	7
8	8	Mark	Antony	Psychiatrist	315-382-6923	markantony@arise.com	221	Irving Ave	Syracuse	NY	13229	8
9	9	Andy	Bichel	Pathologist	315-872-4874	andyb@upstate.com	567	James Street	Syracuse	NY	13225	9
10	10	Wayne	Boucher	Surgeon	315-672-9284	wayneb@mclinic.com	332	Prospect Ave	Syracuse	NY	13211	10
11	11	Ron	Matthew	Pediatrician	315-842-2738	ronmatt@crouse.com	012	Wells Ave	Syracuse	NY	13210	3
12	12	Rob	Anderson	Dermatologist	315-949-2388	robanders@boces.com	883	Univ Ave	Syracuse	NY	13212	2

Query executed successfully.

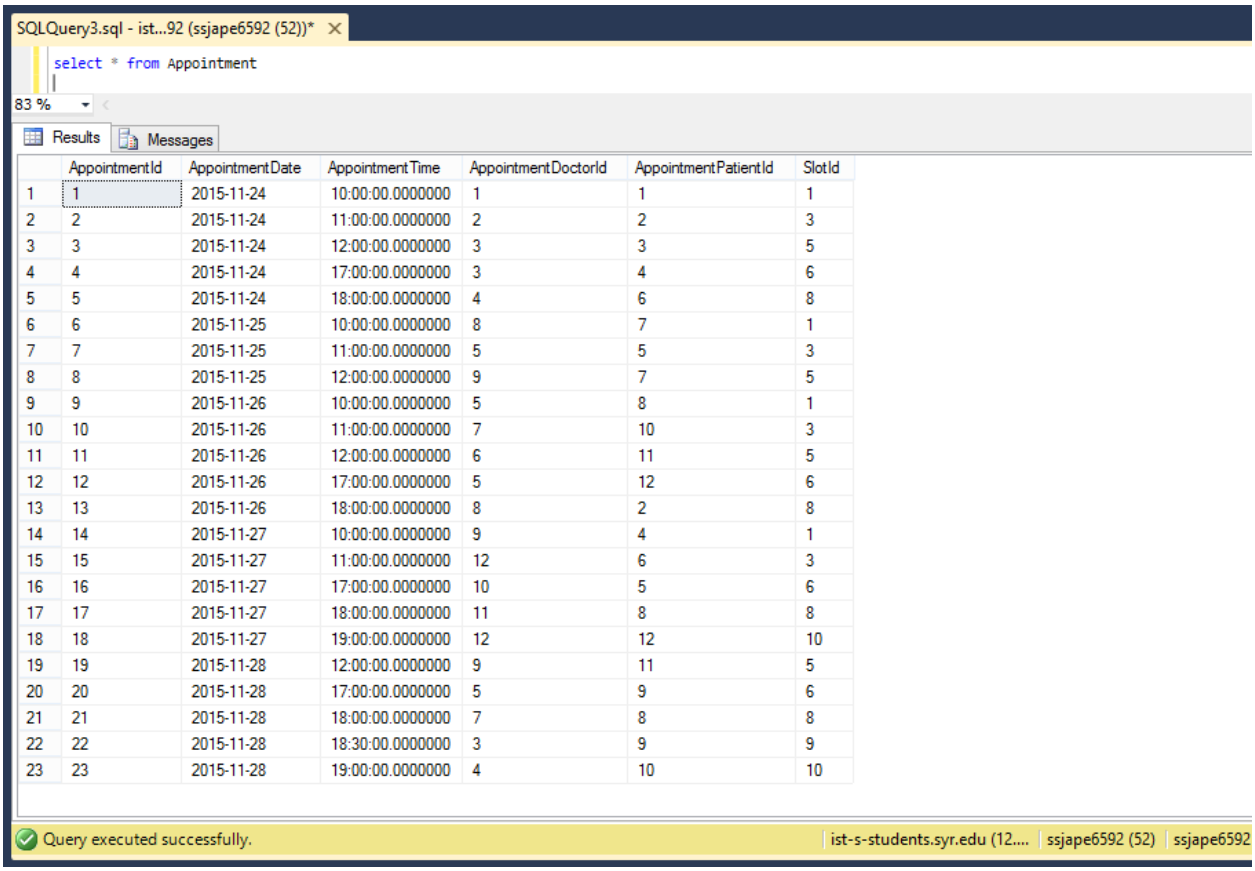
d) Slot Availability Table:



```
select * from SlotAvailability
```

	SlotId	StartTime	EndTime
1	1	10:00:00.0000000	10:30:00.0000000
2	2	10:30:00.0000000	11:00:00.0000000
3	3	11:00:00.0000000	11:30:00.0000000
4	4	11:30:00.0000000	12:00:00.0000000
5	5	12:00:00.0000000	12:30:00.0000000
6	6	17:00:00.0000000	17:30:00.0000000
7	7	17:30:00.0000000	18:00:00.0000000
8	8	18:00:00.0000000	18:30:00.0000000
9	9	18:30:00.0000000	19:00:00.0000000
10	10	19:00:00.0000000	19:30:00.0000000

e) Appointment Table



SQLQuery3.sql - ist...92 (ssjape6592 (52))*

```
select * from Appointment
```

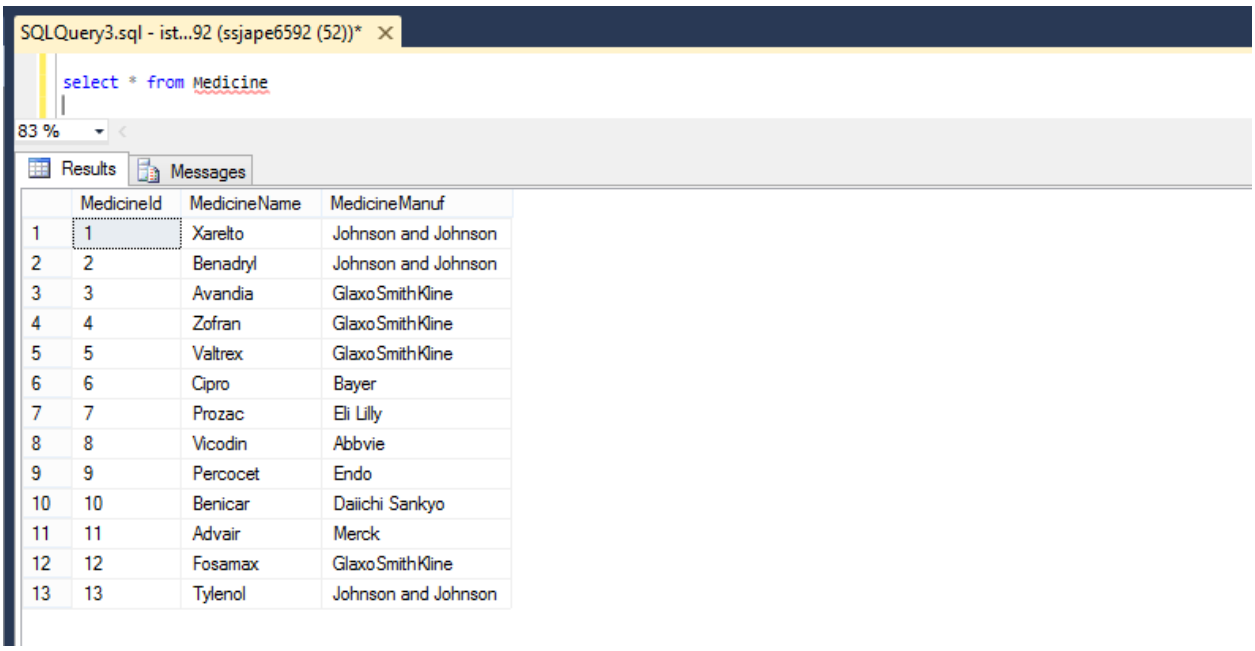
83 %

Results | Messages

	AppointmentId	AppointmentDate	AppointmentTime	AppointmentDoctorId	AppointmentPatientId	SlotId
1	1	2015-11-24	10:00:00.0000000	1	1	1
2	2	2015-11-24	11:00:00.0000000	2	2	3
3	3	2015-11-24	12:00:00.0000000	3	3	5
4	4	2015-11-24	17:00:00.0000000	3	4	6
5	5	2015-11-24	18:00:00.0000000	4	6	8
6	6	2015-11-25	10:00:00.0000000	8	7	1
7	7	2015-11-25	11:00:00.0000000	5	5	3
8	8	2015-11-25	12:00:00.0000000	9	7	5
9	9	2015-11-26	10:00:00.0000000	5	8	1
10	10	2015-11-26	11:00:00.0000000	7	10	3
11	11	2015-11-26	12:00:00.0000000	6	11	5
12	12	2015-11-26	17:00:00.0000000	5	12	6
13	13	2015-11-26	18:00:00.0000000	8	2	8
14	14	2015-11-27	10:00:00.0000000	9	4	1
15	15	2015-11-27	11:00:00.0000000	12	6	3
16	16	2015-11-27	17:00:00.0000000	10	5	6
17	17	2015-11-27	18:00:00.0000000	11	8	8
18	18	2015-11-27	19:00:00.0000000	12	12	10
19	19	2015-11-28	12:00:00.0000000	9	11	5
20	20	2015-11-28	17:00:00.0000000	5	9	6
21	21	2015-11-28	18:00:00.0000000	7	8	8
22	22	2015-11-28	18:30:00.0000000	3	9	9
23	23	2015-11-28	19:00:00.0000000	4	10	10

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (52) | ssjape6592

f) Medicine Table:



SQLQuery3.sql - ist...92 (ssjape6592 (52))*

```
select * from Medicine
```

83 %

Results | Messages

	MedicineId	MedicineName	MedicineManuf
1	1	Xarelto	Johnson and Johnson
2	2	Benadryl	Johnson and Johnson
3	3	Avandia	GlaxoSmithKline
4	4	Zofran	GlaxoSmithKline
5	5	Valtrex	GlaxoSmithKline
6	6	Cipro	Bayer
7	7	Prozac	Eli Lilly
8	8	Vicodin	Abbvie
9	9	Percocet	Endo
10	10	Benicar	Daiichi Sankyo
11	11	Advair	Merck
12	12	Fosamax	GlaxoSmithKline
13	13	Tylenol	Johnson and Johnson

g) Pharmacy Table:

```
select * from Medicine

select * from Pharmacy
```

83 %

Results | Messages

	MedicalShopId	MedicalShopName	MedicalShopAddress	MedicalShopEmail
1	1	Alpha Pharmacy	400 Westcott St, Syracuse	medic@alpha.com
2	2	Beta Pharmacy	023 E Genesse St, Syracuse	medic@beta.com
3	3	Gamma Pharmacy	19 Euclid Ave, Syracuse	medic@gamma.com
4	4	Psi Pharmacy	34 Lancaster Ave, Syracuse	medic@psi.com
5	5	Epsolon Pharmacy	302 Liverpool Rd, Syracuse	medic@epsolon.com
6	6	Walmark Pharmacy	958 Fayette St, Syracuse	medic@walmark.com
7	7	Regency Pharmacy	884 Geneva Rd, Syracuse	medic@regency.com
8	8	Global Pharmacy	273 James St, Syracuse	medic@global.com
9	9	Magneta Pharmacy	384 Columbus Ave, Syracuse	medic@magneta.com
10	10	Chroma Pharmacy	106 Hawthorne Ave, Syracuse	medic@chroma.com

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (52) | ssjape65

h) Prescription Table:

```
select * from Prescription
```

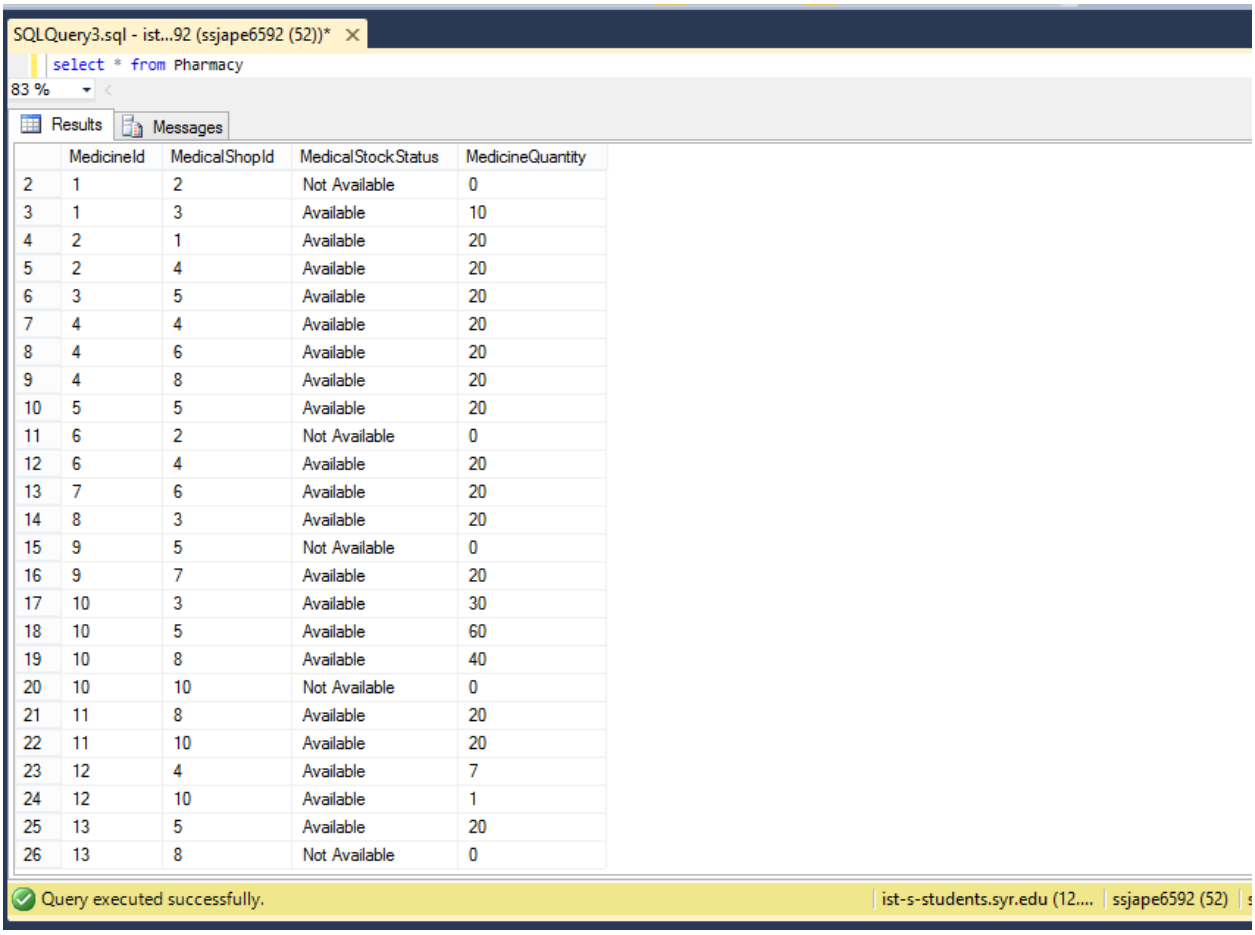
83 %

Results | Messages

	PrescriptionId	AppointmentId	MedicineId	Dosage	Quantity	PrescriptionDateTime	BillingAmount
1	1	1	1	30 days	6	2015-11-24 10:30:00.000	100
2	2	1	2	30 days	6	2015-11-24 11:30:00.000	120
3	3	2	2	1 day	1	2015-11-24 11:30:00.000	20
4	4	2	3	7 days	3	2015-11-24 11:30:00.000	60
5	5	3	1	3 days	2	2015-11-24 12:30:00.000	40
6	6	4	3	7 days	3	2015-11-24 17:30:00.000	60
7	7	4	4	2 days	1	2015-11-24 17:30:00.000	40
8	8	4	7	3 days	2	2015-11-24 17:30:00.000	60
9	9	5	9	3 days	2	2015-11-24 00:00:00.000	60

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (52) | ssjape6592 | 00:00:00 | 9 rows

i) Medicine Availability Table:

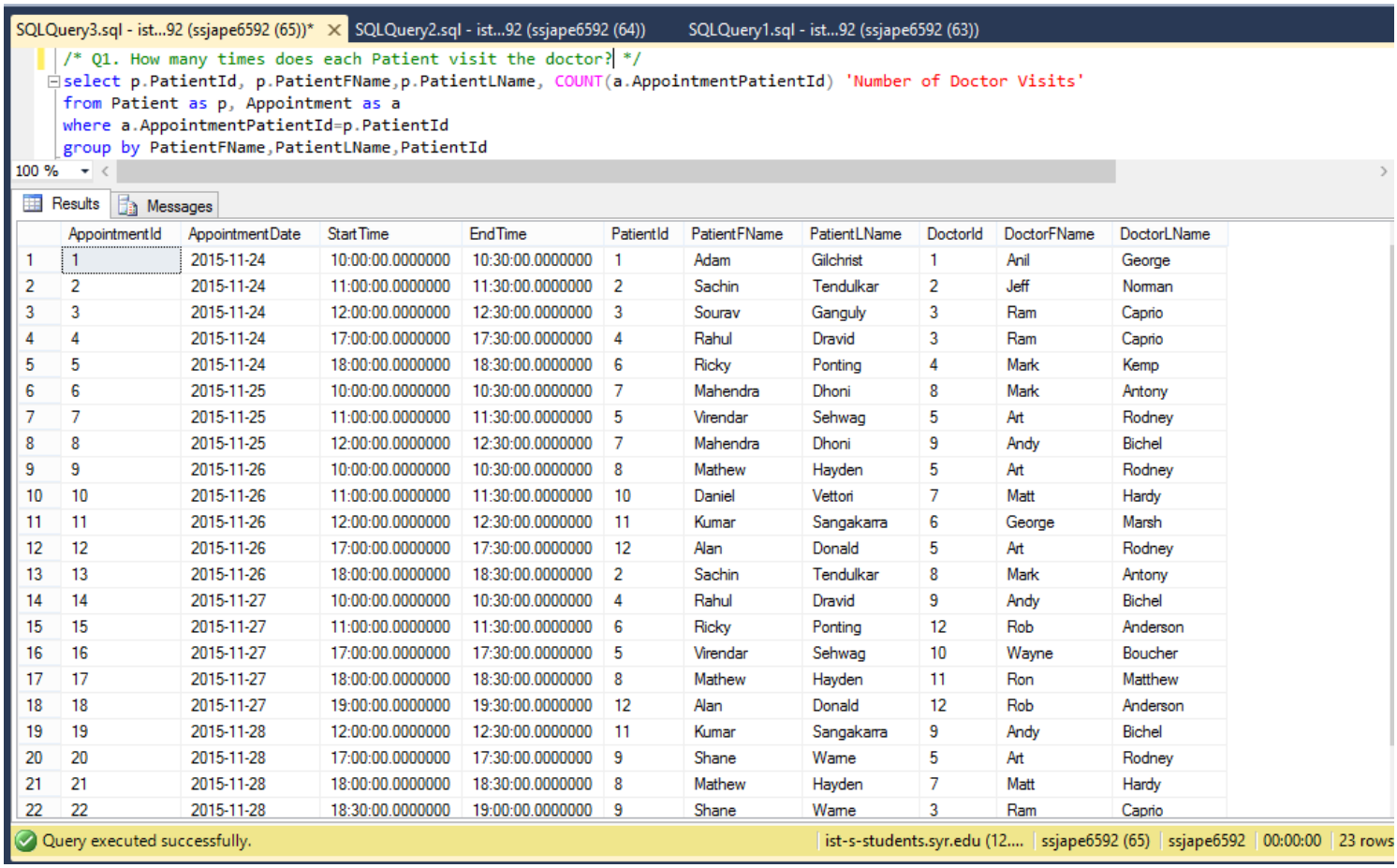


	MedicineId	MedicalShopId	MedicalStockStatus	MedicineQuantity
2	1	2	Not Available	0
3	1	3	Available	10
4	2	1	Available	20
5	2	4	Available	20
6	3	5	Available	20
7	4	4	Available	20
8	4	6	Available	20
9	4	8	Available	20
10	5	5	Available	20
11	6	2	Not Available	0
12	6	4	Available	20
13	7	6	Available	20
14	8	3	Available	20
15	9	5	Not Available	0
16	9	7	Available	20
17	10	3	Available	30
18	10	5	Available	60
19	10	8	Available	40
20	10	10	Not Available	0
21	11	8	Available	20
22	11	10	Available	20
23	12	4	Available	7
24	12	10	Available	1
25	13	5	Available	20
26	13	8	Not Available	0

MAJOR DATA QUESTIONS:

Q1. How many times does each Patient visit the doctor?

```
select p.PatientId, p.PatientFName,p.PatientLName, COUNT(a.AppointmentPatientId) 'Number of Doctor
Visits'
from Patient as p, Appointment as a
where a.AppointmentPatientId=p.PatientId
group by PatientFName,PatientLName,PatientId
```



SQLQuery3.sql - ist...92 (ssjape6592 (65))* | SQLQuery2.sql - ist...92 (ssjape6592 (64)) | SQLQuery1.sql - ist...92 (ssjape6592 (63))

```
/* Q1. How many times does each Patient visit the doctor? */
select p.PatientId, p.PatientFName,p.PatientLName, COUNT(a.AppointmentPatientId) 'Number of Doctor Visits'
from Patient as p, Appointment as a
where a.AppointmentPatientId=p.PatientId
group by PatientFName,PatientLName,PatientId
```

100 % | Results | Messages

	AppointmentId	AppointmentDate	StartTime	EndTime	PatientId	PatientFName	PatientLName	DoctorId	DoctorFName	DoctorLName
1	1	2015-11-24	10:00:00.0000000	10:30:00.0000000	1	Adam	Gilchrist	1	Anil	George
2	2	2015-11-24	11:00:00.0000000	11:30:00.0000000	2	Sachin	Tendulkar	2	Jeff	Norman
3	3	2015-11-24	12:00:00.0000000	12:30:00.0000000	3	Sourav	Ganguly	3	Ram	Caprio
4	4	2015-11-24	17:00:00.0000000	17:30:00.0000000	4	Rahul	Dravid	3	Ram	Caprio
5	5	2015-11-24	18:00:00.0000000	18:30:00.0000000	6	Ricky	Ponting	4	Mark	Kemp
6	6	2015-11-25	10:00:00.0000000	10:30:00.0000000	7	Mahendra	Dhoni	8	Mark	Antony
7	7	2015-11-25	11:00:00.0000000	11:30:00.0000000	5	Virendar	Sehwag	5	Art	Rodney
8	8	2015-11-25	12:00:00.0000000	12:30:00.0000000	7	Mahendra	Dhoni	9	Andy	Bichel
9	9	2015-11-26	10:00:00.0000000	10:30:00.0000000	8	Mathew	Hayden	5	Art	Rodney
10	10	2015-11-26	11:00:00.0000000	11:30:00.0000000	10	Daniel	Vettori	7	Matt	Hardy
11	11	2015-11-26	12:00:00.0000000	12:30:00.0000000	11	Kumar	Sangakarra	6	George	Marsh
12	12	2015-11-26	17:00:00.0000000	17:30:00.0000000	12	Alan	Donald	5	Art	Rodney
13	13	2015-11-26	18:00:00.0000000	18:30:00.0000000	2	Sachin	Tendulkar	8	Mark	Antony
14	14	2015-11-27	10:00:00.0000000	10:30:00.0000000	4	Rahul	Dravid	9	Andy	Bichel
15	15	2015-11-27	11:00:00.0000000	11:30:00.0000000	6	Ricky	Ponting	12	Rob	Anderson
16	16	2015-11-27	17:00:00.0000000	17:30:00.0000000	5	Virendar	Sehwag	10	Wayne	Boucher
17	17	2015-11-27	18:00:00.0000000	18:30:00.0000000	8	Mathew	Hayden	11	Ron	Matthew
18	18	2015-11-27	19:00:00.0000000	19:30:00.0000000	12	Alan	Donald	12	Rob	Anderson
19	19	2015-11-28	12:00:00.0000000	12:30:00.0000000	11	Kumar	Sangakarra	9	Andy	Bichel
20	20	2015-11-28	17:00:00.0000000	17:30:00.0000000	9	Shane	Warne	5	Art	Rodney
21	21	2015-11-28	18:00:00.0000000	18:30:00.0000000	8	Mathew	Hayden	7	Matt	Hardy
22	22	2015-11-28	18:30:00.0000000	19:00:00.0000000	9	Shane	Warne	3	Ram	Caprio

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (65) | ssjape6592 | 00:00:00 | 23 rows

Q2. What is the Status of medicine stock availability at each store?

```
select p.MedicalShopId,p.MedicalShopName,m.MedicineId,m.MedicineName,ma.MedicineQuantity,
ma.MedicalStockStatus
from Medicine as m, MedicineAvailability as ma, Pharmacy as p
where m.MedicineId=ma.MedicineId
and ma.MedicalShopId=p.MedicalShopId
order by MedicalShopId
```

SQLQuery3.sql - ist...92 (ssjape6592 (65))* | SQLQuery2.sql - ist...92 (ssjape6592 (64)) | SQLQuery1.sql - ist...92 (ssjape6592 (63))

```
/*Q2. What is the Status of medicine stock availability at each store?*/
select p.MedicalShopId,p.MedicalShopName,m.MedicineId,m.MedicineName,ma.MedicineQuantity,ma.MedicalStockStatus
from Medicine as m, MedicineAvailability as ma, Pharmacy as p
where m.MedicineId=ma.MedicineId
and ma.MedicalShopId=p.MedicalShopId
order by MedicalShopId
```

100 %

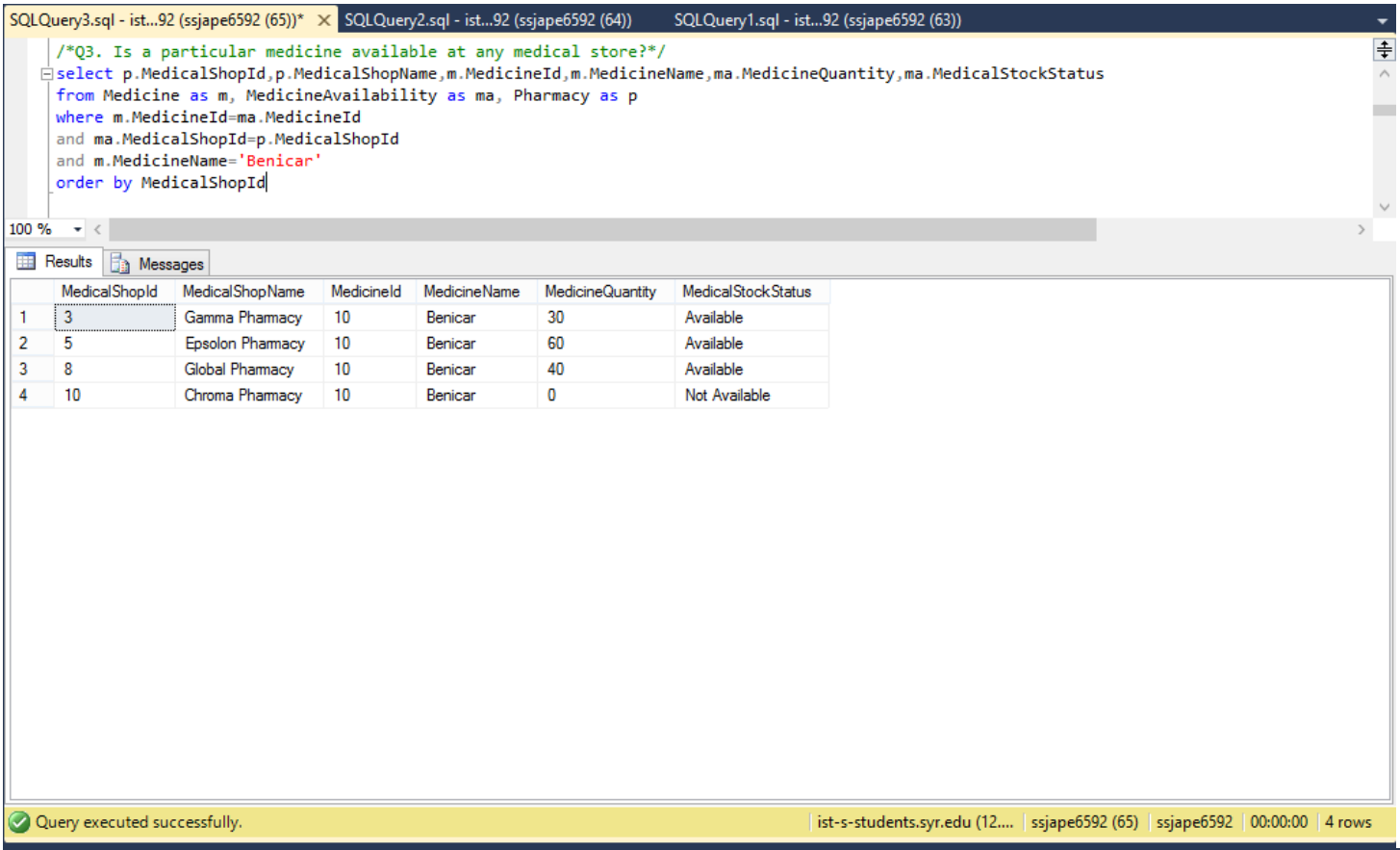
Results | Messages

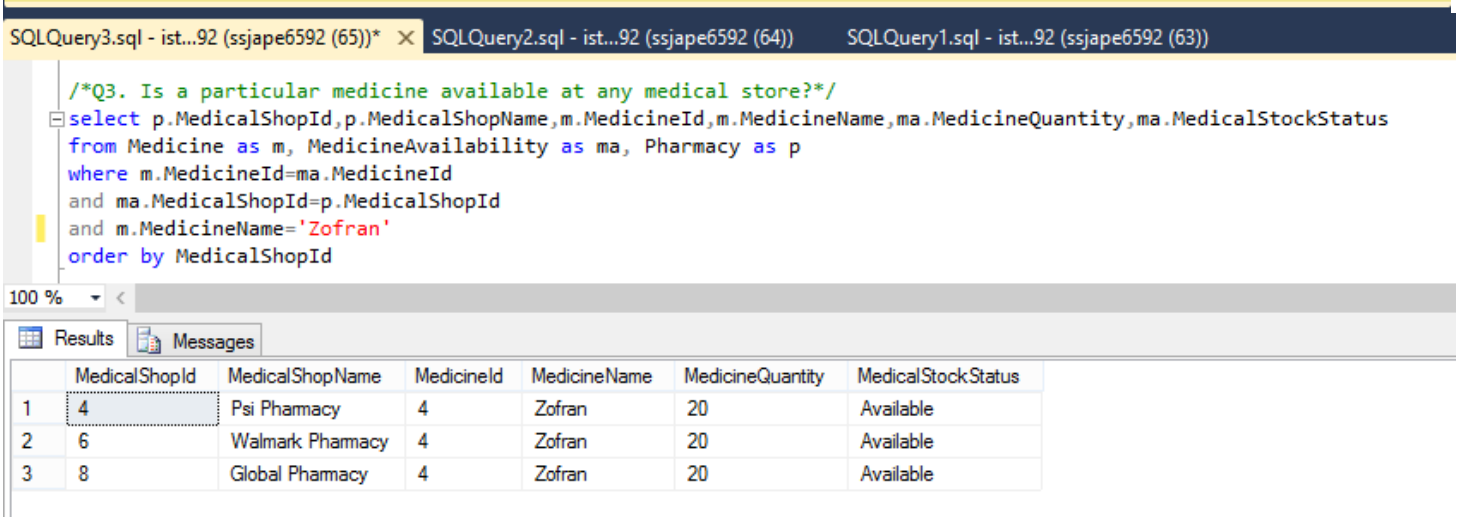
	MedicalShopId	MedicalShopName	MedicineId	MedicineName	MedicineQuantity	MedicalStockStatus
1	1	Alpha Pharmacy	1	Xarelto	20	Available
2	1	Alpha Pharmacy	2	Benadryl	20	Available
3	2	Beta Pharmacy	1	Xarelto	0	Not Available
4	2	Beta Pharmacy	6	Cipro	0	Not Available
5	3	Gamma Pharmacy	1	Xarelto	10	Available
6	3	Gamma Pharmacy	10	Benicar	30	Available
7	3	Gamma Pharmacy	8	Vicodin	20	Available
8	4	Psi Pharmacy	2	Benadryl	20	Available
9	4	Psi Pharmacy	6	Cipro	20	Available
10	4	Psi Pharmacy	4	Zofran	20	Available
11	4	Psi Pharmacy	12	Fosamax	7	Available
12	5	Epsolon Pharmacy	13	Tylenol	20	Available
13	5	Epsolon Pharmacy	5	Valtrex	20	Available
14	5	Epsolon Pharmacy	3	Avandia	20	Available
15	5	Epsolon Pharmacy	9	Percocet	0	Not Available
16	5	Epsolon Pharmacy	10	Benicar	60	Available
17	6	Walmark Pharmacy	4	Zofran	20	Available
18	6	Walmark Pharmacy	7	Prozac	20	Available
19	7	Regency Pharmacy	9	Percocet	20	Available
20	8	Global Pharmacy	11	Advair	20	Available
21	8	Global Pharmacy	10	Benicar	40	Available

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (65) | ssjape6592 | 00:00:00 | 26 rows

Q3. Is a particular medicine available at any medical store?

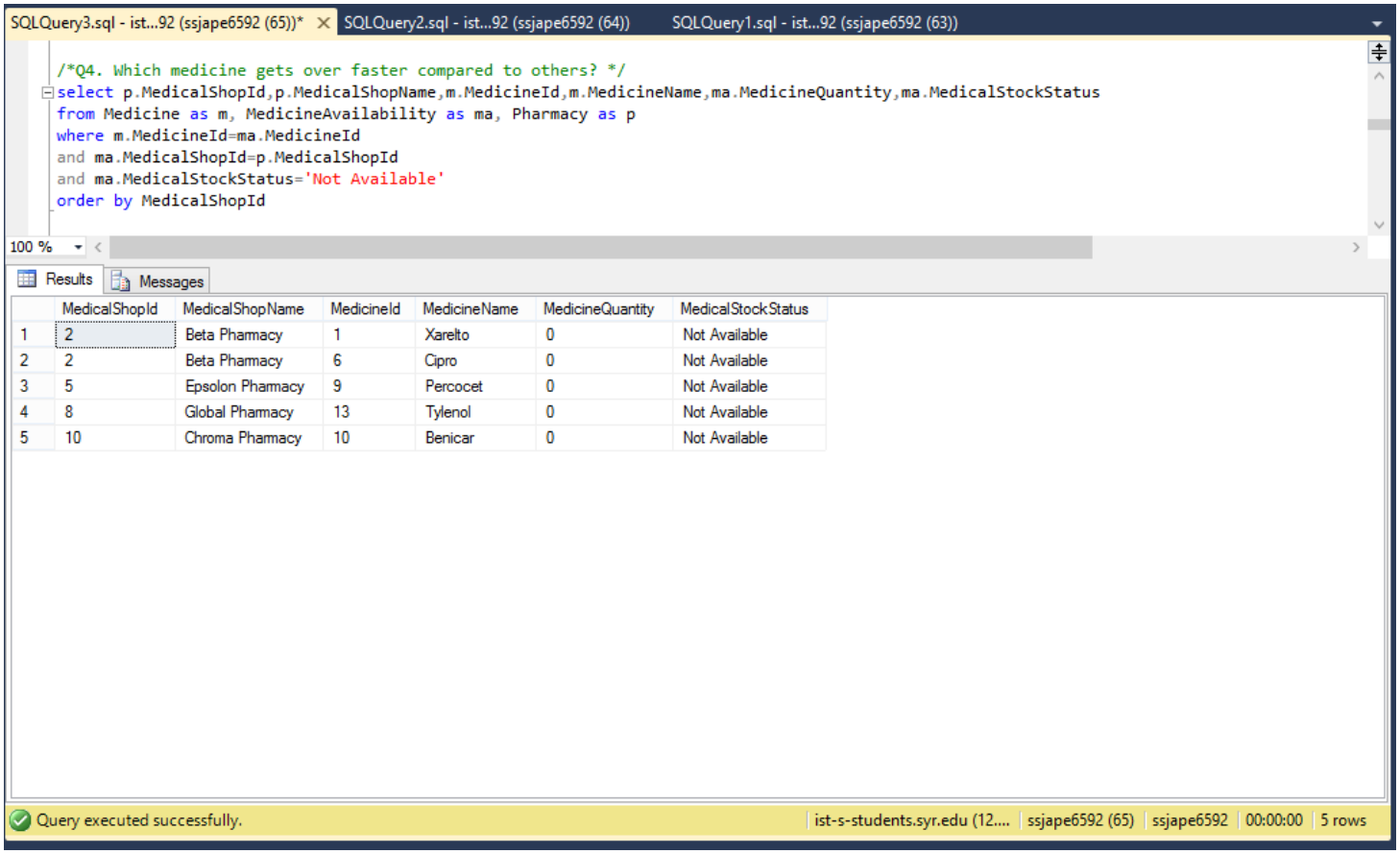
```
select p.MedicalShopId,p.MedicalShopName,m.MedicineId,m.MedicineName,ma.MedicineQuantity,
ma.MedicalStockStatus
from Medicine as m, MedicineAvailability as ma, Pharmacy as p
where m.MedicineId=ma.MedicineId
and ma.MedicalShopId=p.MedicalShopId
and m.MedicineName='Benicar'
order by MedicalShopId
```





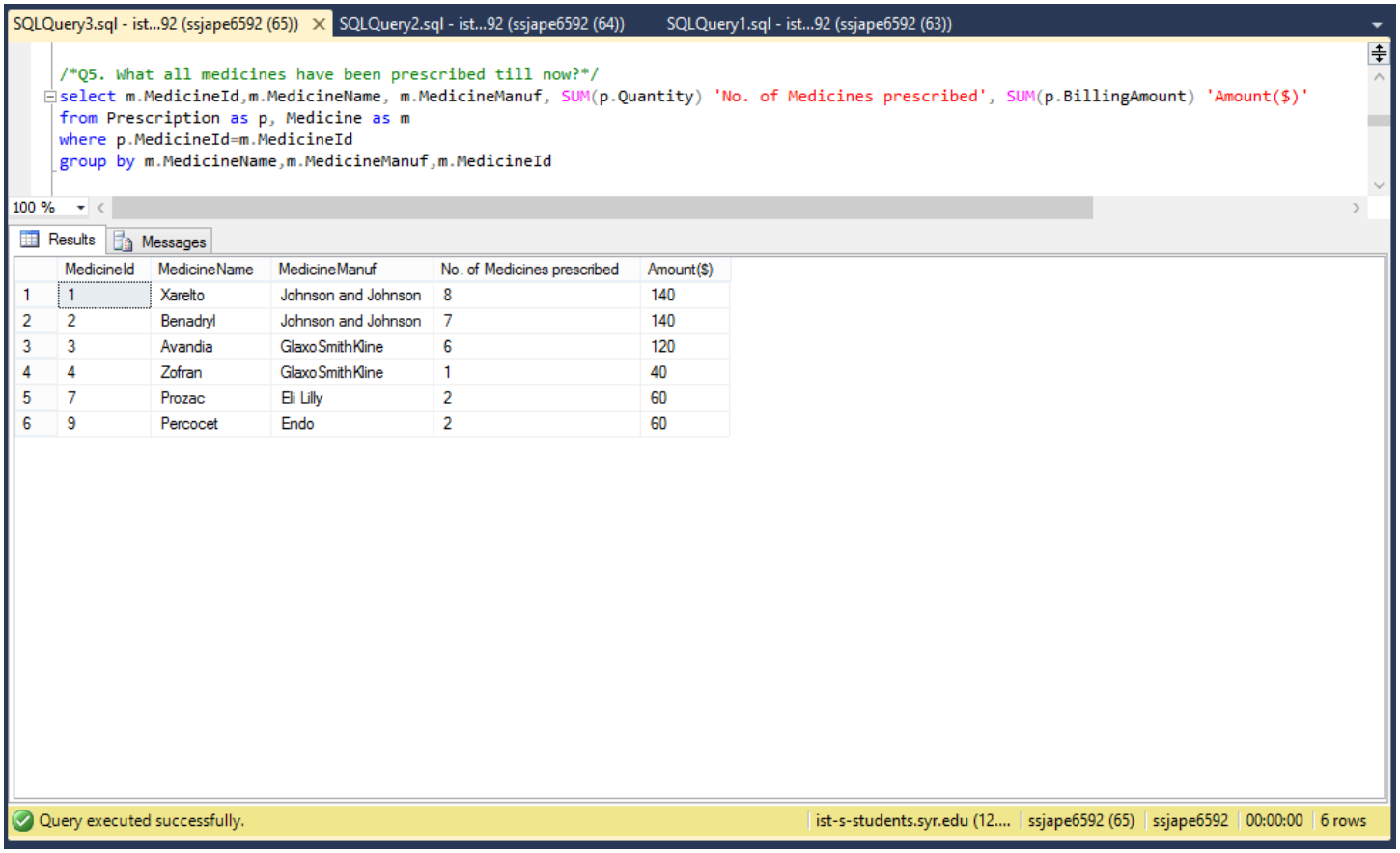
Q4. Which medicine gets over faster compared to others?

```
select p.MedicalShopId,p.MedicalShopName,m.MedicineId,m.MedicineName,ma.MedicineQuantity,
ma.MedicalStockStatus
from Medicine as m, MedicineAvailability as ma, Pharmacy as p
where m.MedicineId=ma.MedicineId
and ma.MedicalShopId=p.MedicalShopId
and ma.MedicalStockStatus='Not Available'
order by MedicalShopId
```



Q5. What all medicines have been prescribed till now?

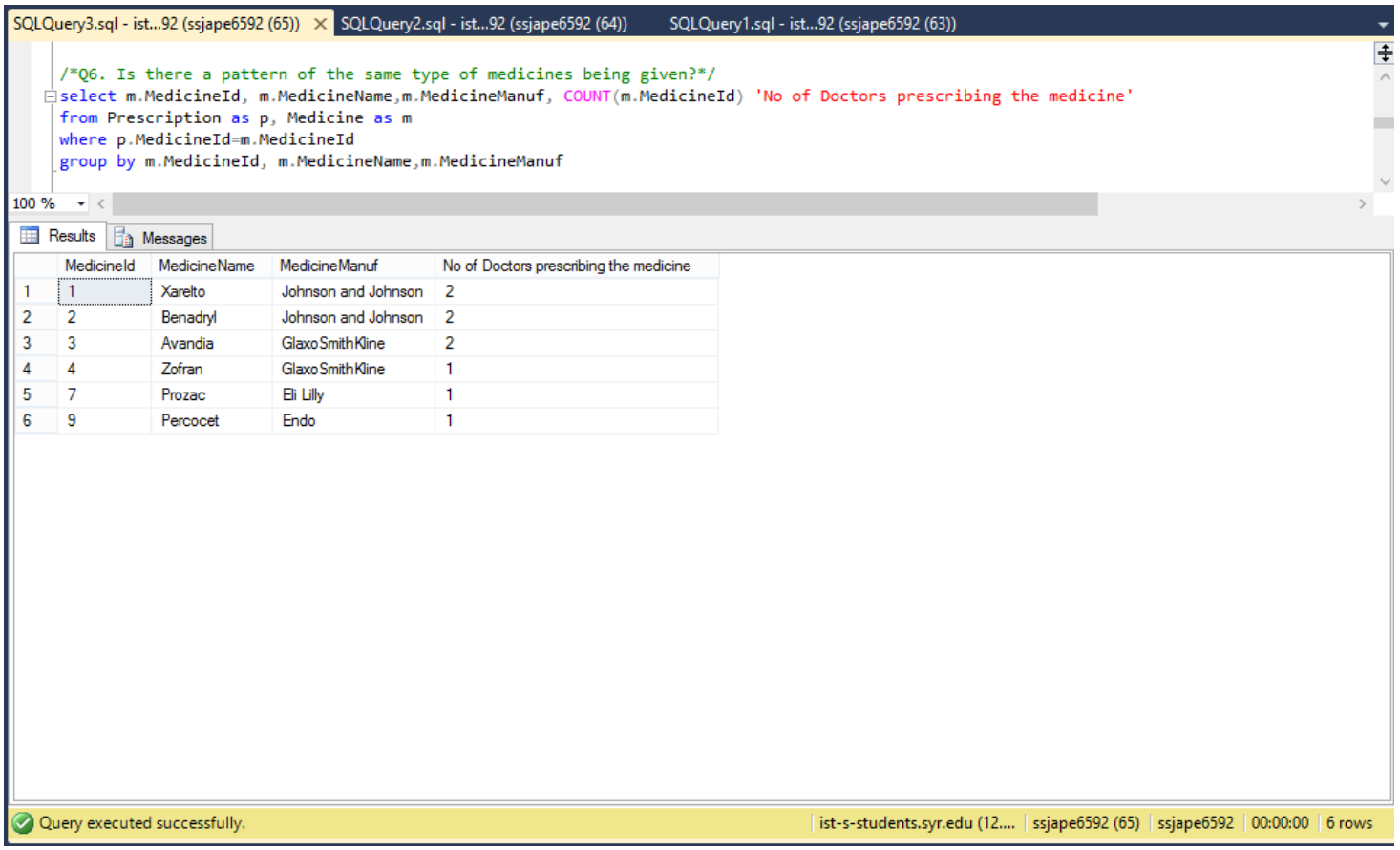
```
select m.MedicineId,m.MedicineName, m.MedicineManuf, SUM(p.Quantity) 'No. of Medicines
prescribed', SUM(p.BillingAmount) 'Amount($)'
from Prescription as p, Medicine as m
where p.MedicineId=m.MedicineId
group by m.MedicineName,m.MedicineManuf,m.MedicineId
```



	MedicineId	MedicineName	MedicineManuf	No. of Medicines prescribed	Amount($)
1	1	Xarelto	Johnson and Johnson	8	140
2	2	Benadryl	Johnson and Johnson	7	140
3	3	Avandia	GlaxoSmithKline	6	120
4	4	Zofran	GlaxoSmithKline	1	40
5	7	Prozac	Eli Lilly	2	60
6	9	Percocet	Endo	2	60

Q6. Is there a pattern of the same type of medicines being given?

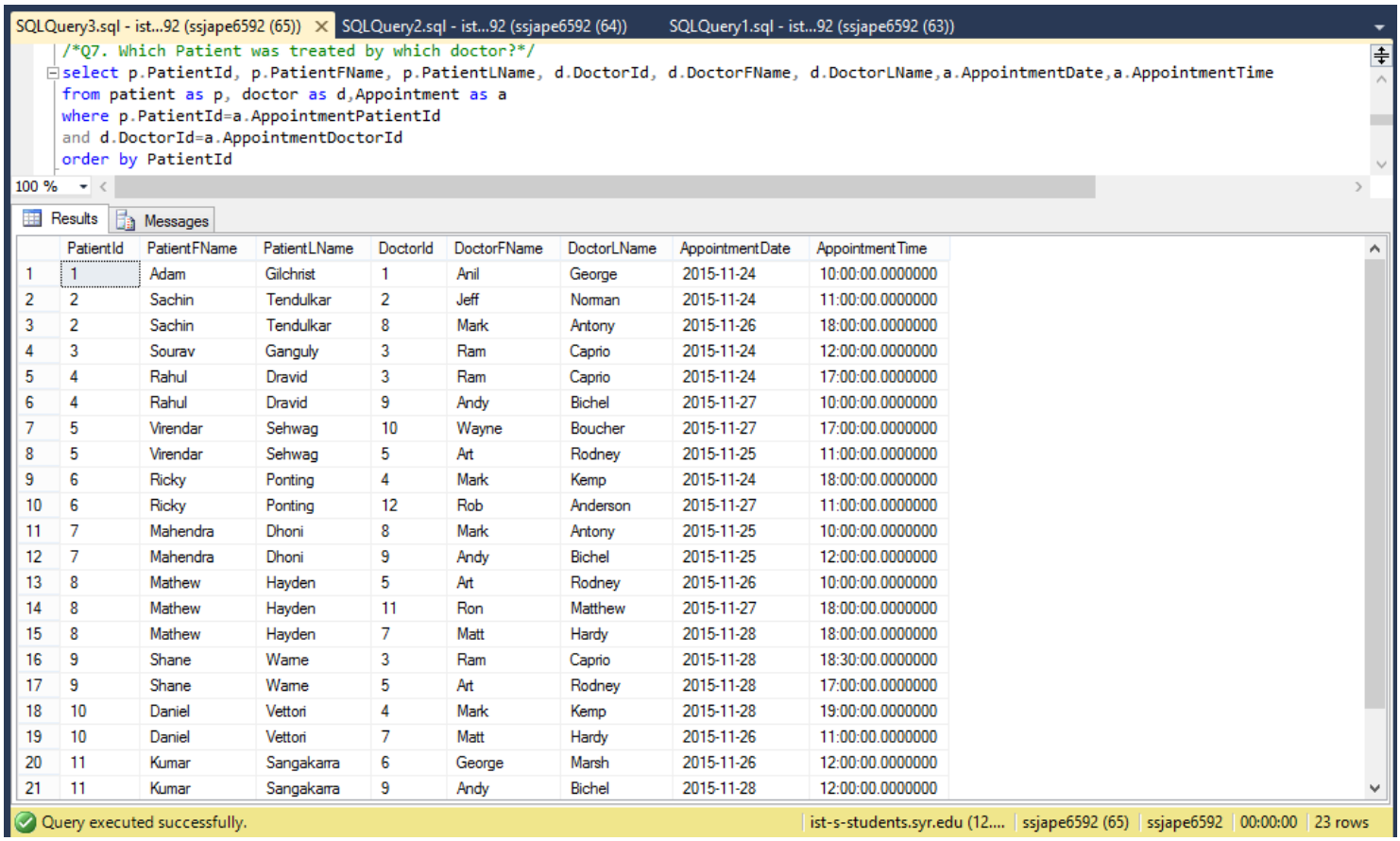
```
select m.MedicineId, m.MedicineName,m.MedicineManuf, COUNT(m.MedicineId) 'No of Doctors
prescribing the medicine'
from Prescription as p, Medicine as m
where p.MedicineId=m.MedicineId
group by m.MedicineId, m.MedicineName,m.MedicineManuf
```



	MedicineId	MedicineName	MedicineManuf	No of Doctors prescribing the medicine
1	1	Xarelto	Johnson and Johnson	2
2	2	Benadryl	Johnson and Johnson	2
3	3	Avandia	GlaxoSmithKline	2
4	4	Zofran	GlaxoSmithKline	1
5	7	Prozac	Eli Lilly	1
6	9	Percocet	Endo	1

Q7. Which Patient was treated by which doctor?

```
select p.PatientId, p.PatientFName, p.PatientLName, d.DoctorId, d.DoctorFName,
d.DoctorLName, a.AppointmentDate, a.AppointmentTime
from patient as p, doctor as d,Appointment as a
where p.PatientId=a.AppointmentPatientId
and d.DoctorId=a.AppointmentDoctorId
order by PatientId
```



SQLQuery3.sql - ist...92 (ssjape6592 (65)) | SQLQuery2.sql - ist...92 (ssjape6592 (64)) | SQLQuery1.sql - ist...92 (ssjape6592 (63))

```
/*Q7. Which Patient was treated by which doctor?*/
select p.PatientId, p.PatientFName, p.PatientLName, d.DoctorId, d.DoctorFName, d.DoctorLName,a.AppointmentDate,a.AppointmentTime
from patient as p, doctor as d,Appointment as a
where p.PatientId=a.AppointmentPatientId
and d.DoctorId=a.AppointmentDoctorId
order by PatientId
```

100 %

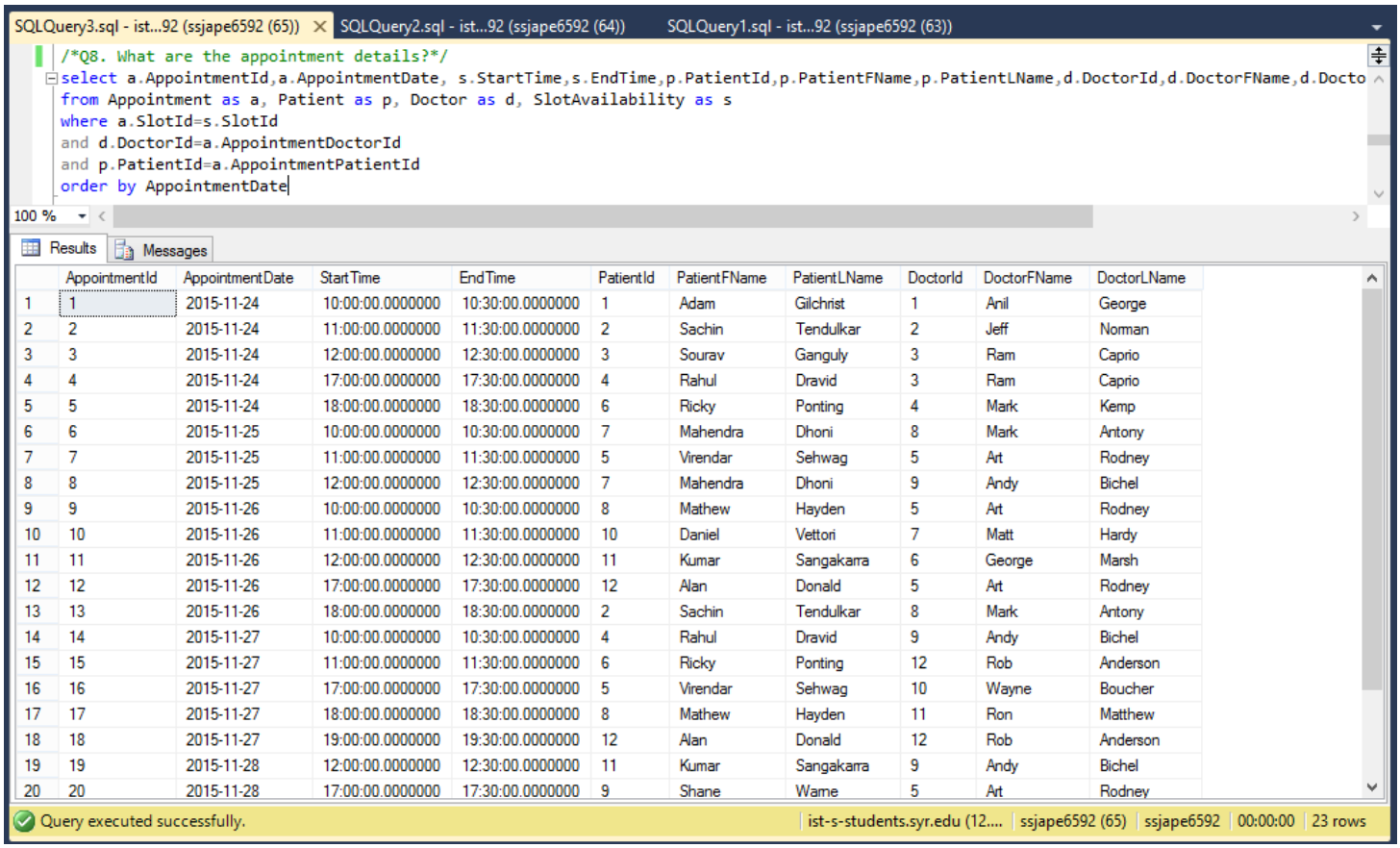
Results | Messages

	PatientId	PatientFName	PatientLName	DoctorId	DoctorFName	DoctorLName	AppointmentDate	AppointmentTime
1	1	Adam	Gilchrist	1	Anil	George	2015-11-24	10:00:00.0000000
2	2	Sachin	Tendulkar	2	Jeff	Norman	2015-11-24	11:00:00.0000000
3	2	Sachin	Tendulkar	8	Mark	Antony	2015-11-26	18:00:00.0000000
4	3	Sourav	Ganguly	3	Ram	Caprio	2015-11-24	12:00:00.0000000
5	4	Rahul	Dravid	3	Ram	Caprio	2015-11-24	17:00:00.0000000
6	4	Rahul	Dravid	9	Andy	Bichel	2015-11-27	10:00:00.0000000
7	5	Virendar	Sehwag	10	Wayne	Boucher	2015-11-27	17:00:00.0000000
8	5	Virendar	Sehwag	5	Art	Rodney	2015-11-25	11:00:00.0000000
9	6	Ricky	Ponting	4	Mark	Kemp	2015-11-24	18:00:00.0000000
10	6	Ricky	Ponting	12	Rob	Anderson	2015-11-27	11:00:00.0000000
11	7	Mahendra	Dhoni	8	Mark	Antony	2015-11-25	10:00:00.0000000
12	7	Mahendra	Dhoni	9	Andy	Bichel	2015-11-25	12:00:00.0000000
13	8	Mathew	Hayden	5	Art	Rodney	2015-11-26	10:00:00.0000000
14	8	Mathew	Hayden	11	Ron	Matthew	2015-11-27	18:00:00.0000000
15	8	Mathew	Hayden	7	Matt	Hardy	2015-11-28	18:00:00.0000000
16	9	Shane	Wame	3	Ram	Caprio	2015-11-28	18:30:00.0000000
17	9	Shane	Wame	5	Art	Rodney	2015-11-28	17:00:00.0000000
18	10	Daniel	Vettori	4	Mark	Kemp	2015-11-28	19:00:00.0000000
19	10	Daniel	Vettori	7	Matt	Hardy	2015-11-26	11:00:00.0000000
20	11	Kumar	Sangakarra	6	George	Marsh	2015-11-26	12:00:00.0000000
21	11	Kumar	Sangakarra	9	Andy	Bichel	2015-11-28	12:00:00.0000000

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (65) | ssjape6592 | 00:00:00 | 23 rows

Q8. What are the appointment details?

```
select a.AppointmentId,a.AppointmentDate, s.StartTime, s.EndTime, p.PatientId,
p.PatientFName, p.PatientLName, d.DoctorId, d.DoctorFName, d.DoctorLName
from Appointment as a, Patient as p, Doctor as d, SlotAvailability as s
where a.SlotId=s.SlotId
and d.DoctorId=a.AppointmentDoctorId
and p.PatientId=a.AppointmentPatientId
order by AppointmentDate
```



SQLQuery3.sql - ist...92 (ssjape6592 (65)) | SQLQuery2.sql - ist...92 (ssjape6592 (64)) | SQLQuery1.sql - ist...92 (ssjape6592 (63))

```
/*Q8. What are the appointment details?*/
select a.AppointmentId,a.AppointmentDate, s.StartTime,s.EndTime,p.PatientId,p.PatientFName,p.PatientLName,d.DoctorId,d.DoctorFName,d.Docto
from Appointment as a, Patient as p, Doctor as d, SlotAvailability as s
where a.SlotId=s.SlotId
and d.DoctorId=a.AppointmentDoctorId
and p.PatientId=a.AppointmentPatientId
order by AppointmentDate
```

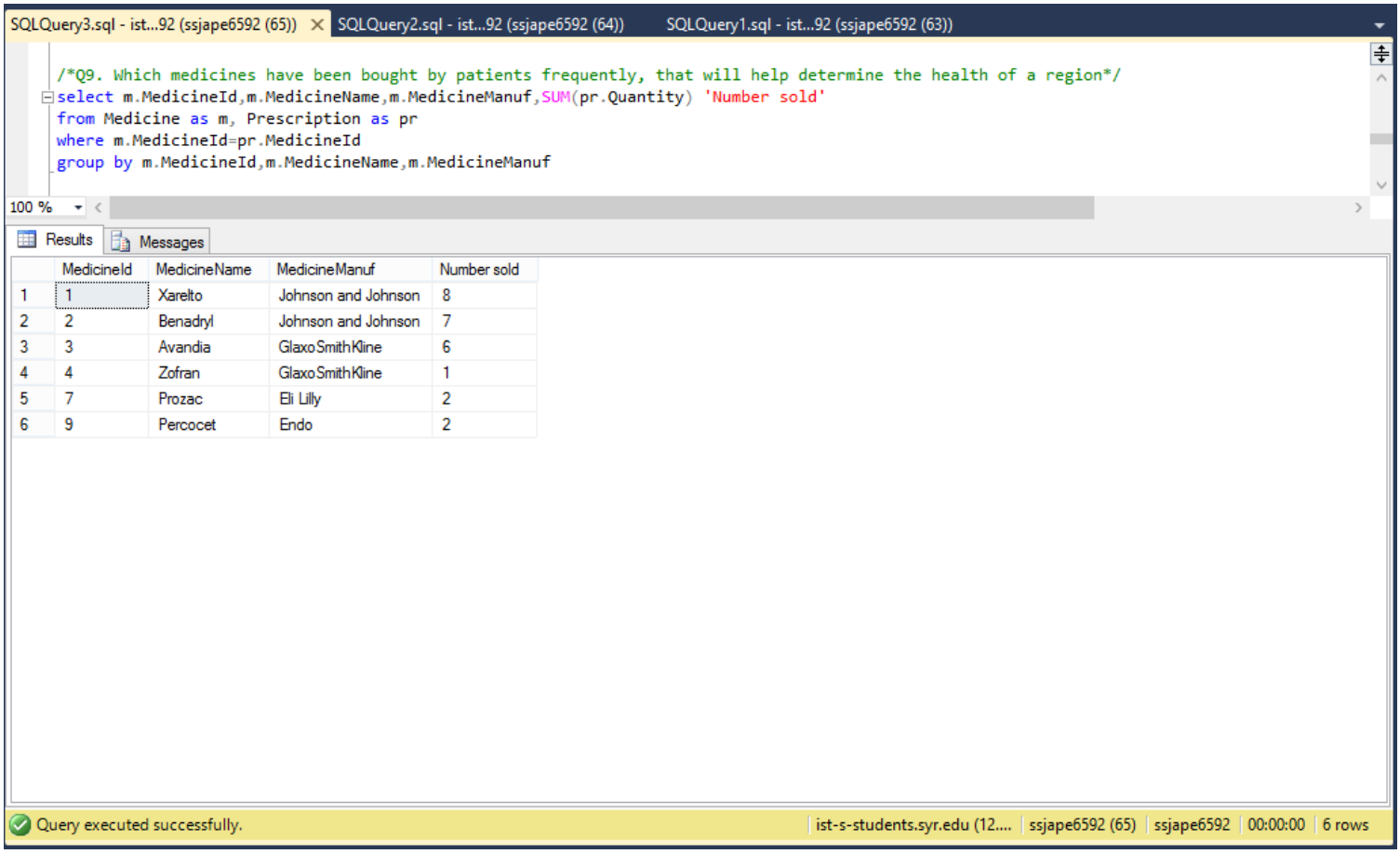
100 % | Results | Messages

	AppointmentId	AppointmentDate	StartTime	EndTime	PatientId	PatientFName	PatientLName	DoctorId	DoctorFName	DoctorLName
1	1	2015-11-24	10:00:00.0000000	10:30:00.0000000	1	Adam	Gilchrist	1	Anil	George
2	2	2015-11-24	11:00:00.0000000	11:30:00.0000000	2	Sachin	Tendulkar	2	Jeff	Norman
3	3	2015-11-24	12:00:00.0000000	12:30:00.0000000	3	Sourav	Ganguly	3	Ram	Caprio
4	4	2015-11-24	17:00:00.0000000	17:30:00.0000000	4	Rahul	Dravid	3	Ram	Caprio
5	5	2015-11-24	18:00:00.0000000	18:30:00.0000000	6	Ricky	Ponting	4	Mark	Kemp
6	6	2015-11-25	10:00:00.0000000	10:30:00.0000000	7	Mahendra	Dhoni	8	Mark	Antony
7	7	2015-11-25	11:00:00.0000000	11:30:00.0000000	5	Virendar	Sehwag	5	Art	Rodney
8	8	2015-11-25	12:00:00.0000000	12:30:00.0000000	7	Mahendra	Dhoni	9	Andy	Bichel
9	9	2015-11-26	10:00:00.0000000	10:30:00.0000000	8	Mathew	Hayden	5	Art	Rodney
10	10	2015-11-26	11:00:00.0000000	11:30:00.0000000	10	Daniel	Vettori	7	Matt	Hardy
11	11	2015-11-26	12:00:00.0000000	12:30:00.0000000	11	Kumar	Sangakarra	6	George	Marsh
12	12	2015-11-26	17:00:00.0000000	17:30:00.0000000	12	Alan	Donald	5	Art	Rodney
13	13	2015-11-26	18:00:00.0000000	18:30:00.0000000	2	Sachin	Tendulkar	8	Mark	Antony
14	14	2015-11-27	10:00:00.0000000	10:30:00.0000000	4	Rahul	Dravid	9	Andy	Bichel
15	15	2015-11-27	11:00:00.0000000	11:30:00.0000000	6	Ricky	Ponting	12	Rob	Anderson
16	16	2015-11-27	17:00:00.0000000	17:30:00.0000000	5	Virendar	Sehwag	10	Wayne	Boucher
17	17	2015-11-27	18:00:00.0000000	18:30:00.0000000	8	Mathew	Hayden	11	Ron	Matthew
18	18	2015-11-27	19:00:00.0000000	19:30:00.0000000	12	Alan	Donald	12	Rob	Anderson
19	19	2015-11-28	12:00:00.0000000	12:30:00.0000000	11	Kumar	Sangakarra	9	Andy	Bichel
20	20	2015-11-28	17:00:00.0000000	17:30:00.0000000	9	Shane	Warne	5	Art	Rodney

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (65) | ssjape6592 | 00:00:00 | 23 rows

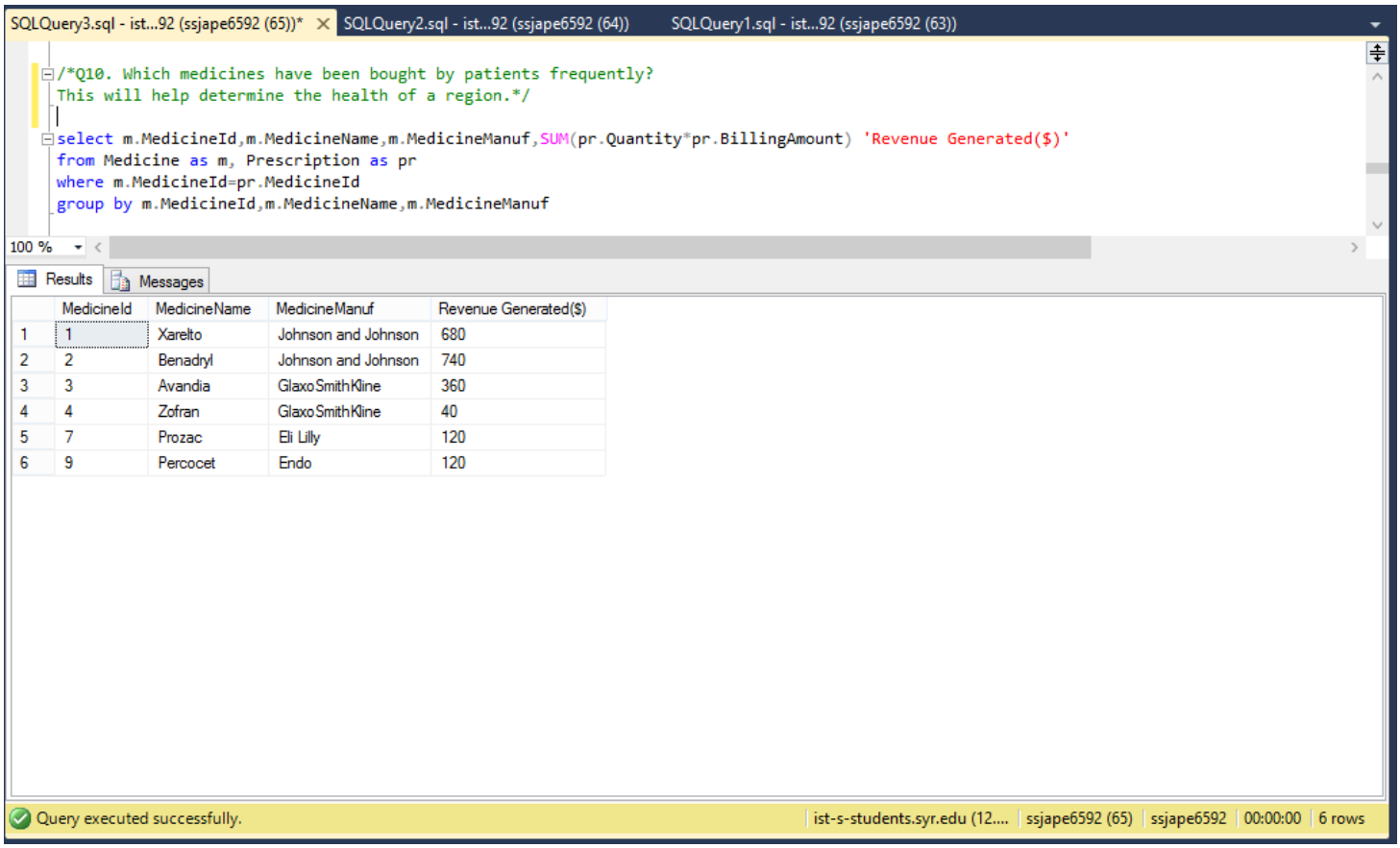
Q9. Which medicines have been bought by patients frequently? This will help determine the health of a region.

```
select m.MedicineId,m.MedicineName,m.MedicineManuf,SUM(pr.Quantity) 'Number sold'
from Medicine as m, Prescription as pr
where m.MedicineId=pr.MedicineId
group by m.MedicineId,m.MedicineName,m.MedicineManuf
```



Q10. Which medicines have been bought by patients frequently? This will help determine the health of a region.

```
select m.MedicineId, m.MedicineName, m.MedicineManuf, SUM(pr.Quantity*pr.BillingAmount)
'Revenue Generated($)'
from Medicine as m, Prescription as pr
where m.MedicineId=pr.MedicineId
group by m.MedicineId, m.MedicineName, m.MedicineManuf
```



	MedicineId	MedicineName	MedicineManuf	Revenue Generated($)
1	1	Xarelto	Johnson and Johnson	680
2	2	Benadryl	Johnson and Johnson	740
3	3	Avandia	GlaxoSmithKline	360
4	4	Zofran	GlaxoSmithKline	40
5	7	Prozac	Eli Lilly	120
6	9	Percocet	Endo	120

Q11. What is the appointment schedule of each doctor?

```
select d.DoctorFName, d.DoctorLName, d.DoctorDescr, d.DoctorHospId, h.HospitalName,
a.AppointmentDate, a.AppointmentTime
from Doctor as d, Hospital as h, Appointment as a
where d.DoctorId=a.AppointmentDoctorId
and h.HospitalId=d.DoctorHospId
order by d.DoctorId
```

SQLQuery3.sql - ist...92 (ssjape6592 (65))* | SQLQuery2.sql - ist...92 (ssjape6592 (64)) | SQLQuery1.sql - ist...92 (ssjape6592 (63))

```
/*Q11. What is the appointment schedule of each doctor?*/
select d.DoctorFName,d.DoctorLName,d.DoctorDescr,d.DoctorHospId, h.HospitalName,a.AppointmentDate,a.AppointmentTime
from Doctor as d, Hospital as h, Appointment as a
where d.DoctorId=a.AppointmentDoctorId
and h.HospitalId=d.DoctorHospId
order by d.DoctorId
```

100 %

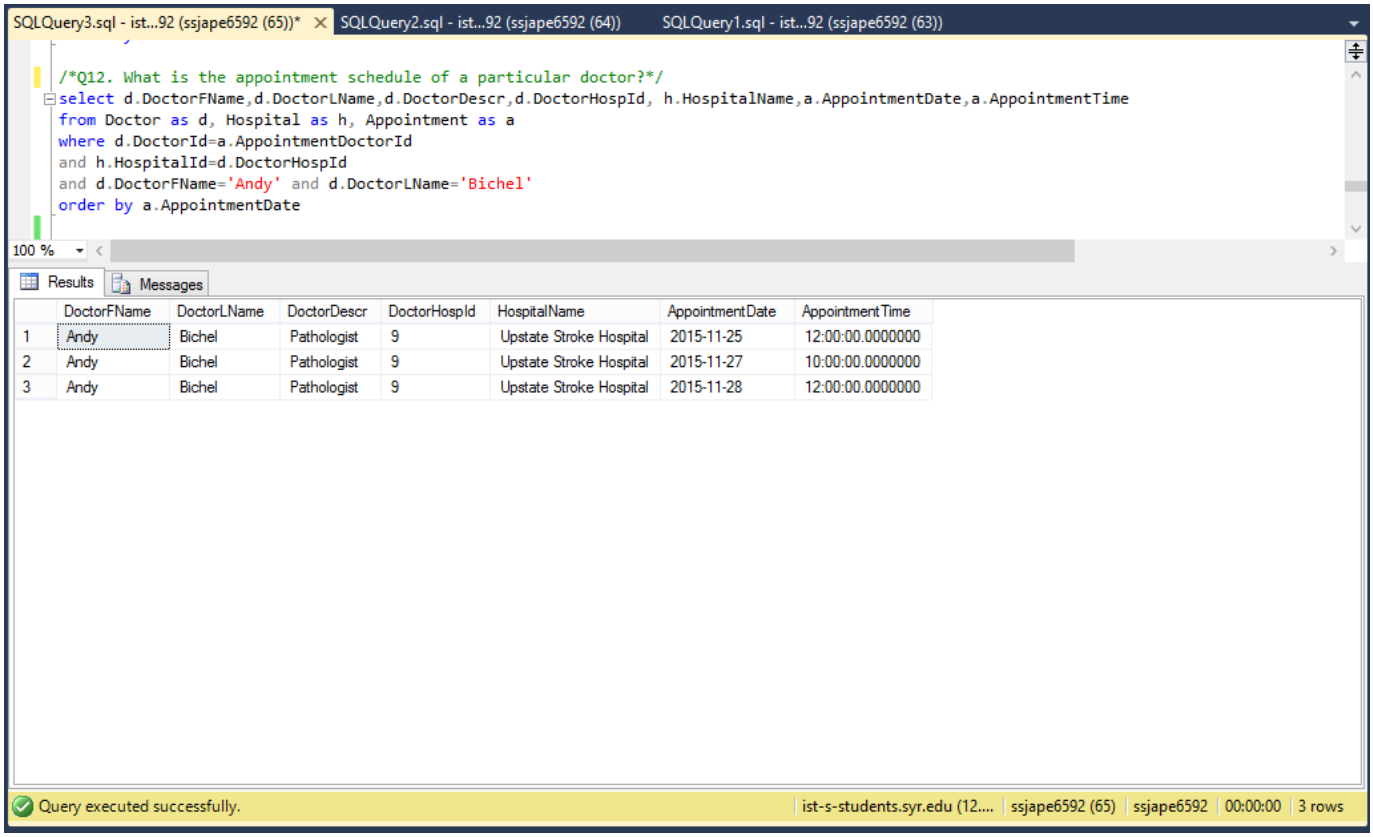
Results | Messages

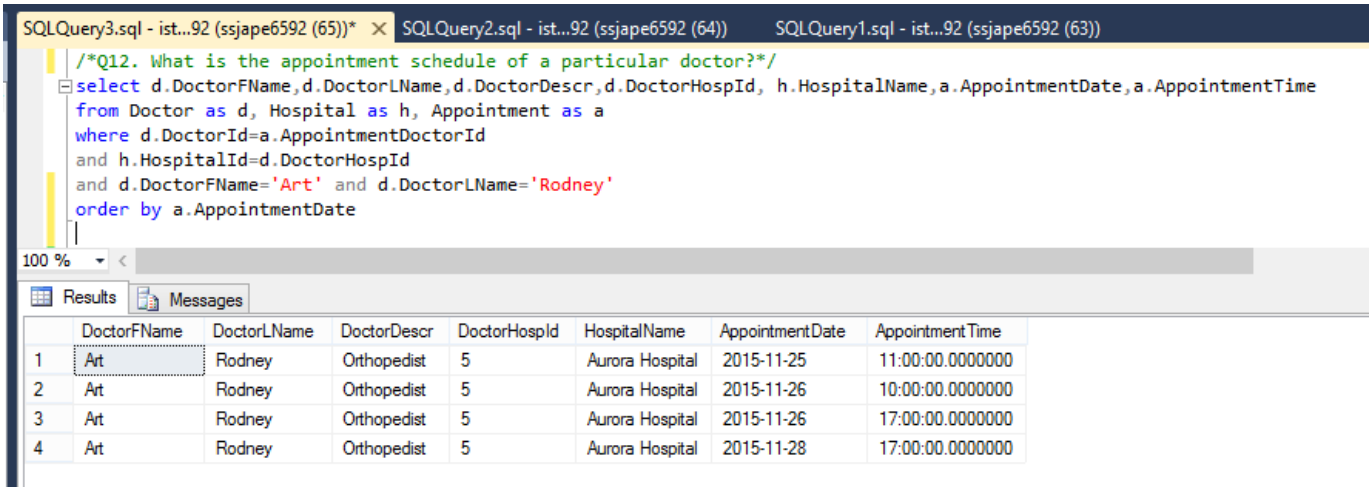
	DoctorFName	DoctorLName	DoctorDescr	DoctorHospId	HospitalName	AppointmentDate	AppointmentTime
1	Anil	George	Cardiologist	1	Community-General Foundation	2015-11-24	10:00:00.0000000
2	Jeff	Norman	Dermatologist	2	Boce Onondaga Cortland Madison	2015-11-24	11:00:00.0000000
3	Ram	Caprio	Gynecologist	3	Crouse Hospital	2015-11-24	12:00:00.0000000
4	Ram	Caprio	Gynecologist	3	Crouse Hospital	2015-11-24	17:00:00.0000000
5	Ram	Caprio	Gynecologist	3	Crouse Hospital	2015-11-28	18:30:00.0000000
6	Mark	Kemp	Cardiology	4	Upstate University Hospital	2015-11-24	18:00:00.0000000
7	Mark	Kemp	Cardiology	4	Upstate University Hospital	2015-11-28	19:00:00.0000000
8	Art	Rodney	Orthopedist	5	Aurora Hospital	2015-11-25	11:00:00.0000000
9	Art	Rodney	Orthopedist	5	Aurora Hospital	2015-11-26	10:00:00.0000000
10	Art	Rodney	Orthopedist	5	Aurora Hospital	2015-11-26	17:00:00.0000000
11	Art	Rodney	Orthopedist	5	Aurora Hospital	2015-11-28	17:00:00.0000000
12	George	Marsh	Cardiology	6	St Josephs Hospital	2015-11-26	12:00:00.0000000
13	Matt	Hardy	Surgeon	7	American Red Cross	2015-11-26	11:00:00.0000000
14	Matt	Hardy	Surgeon	7	American Red Cross	2015-11-28	18:00:00.0000000
15	Mark	Antony	Psychiatrist	8	Arise Hospital	2015-11-25	10:00:00.0000000
16	Mark	Antony	Psychiatrist	8	Arise Hospital	2015-11-26	18:00:00.0000000
17	Andy	Bichel	Pathologist	9	Upstate Stroke Hospital	2015-11-25	12:00:00.0000000
18	Andy	Bichel	Pathologist	9	Upstate Stroke Hospital	2015-11-27	10:00:00.0000000
19	Andy	Bichel	Pathologist	9	Upstate Stroke Hospital	2015-11-28	12:00:00.0000000
20	Wayne	Boucher	Surgeon	10	Family Medicene Clinic	2015-11-27	17:00:00.0000000

Query executed successfully. | ist-s-students.syr.edu (12.... | ssjape6592 (65) | ssjape6592 | 00:00:00 | 23 rows

Q12. What is the appointment schedule of a particular doctor?

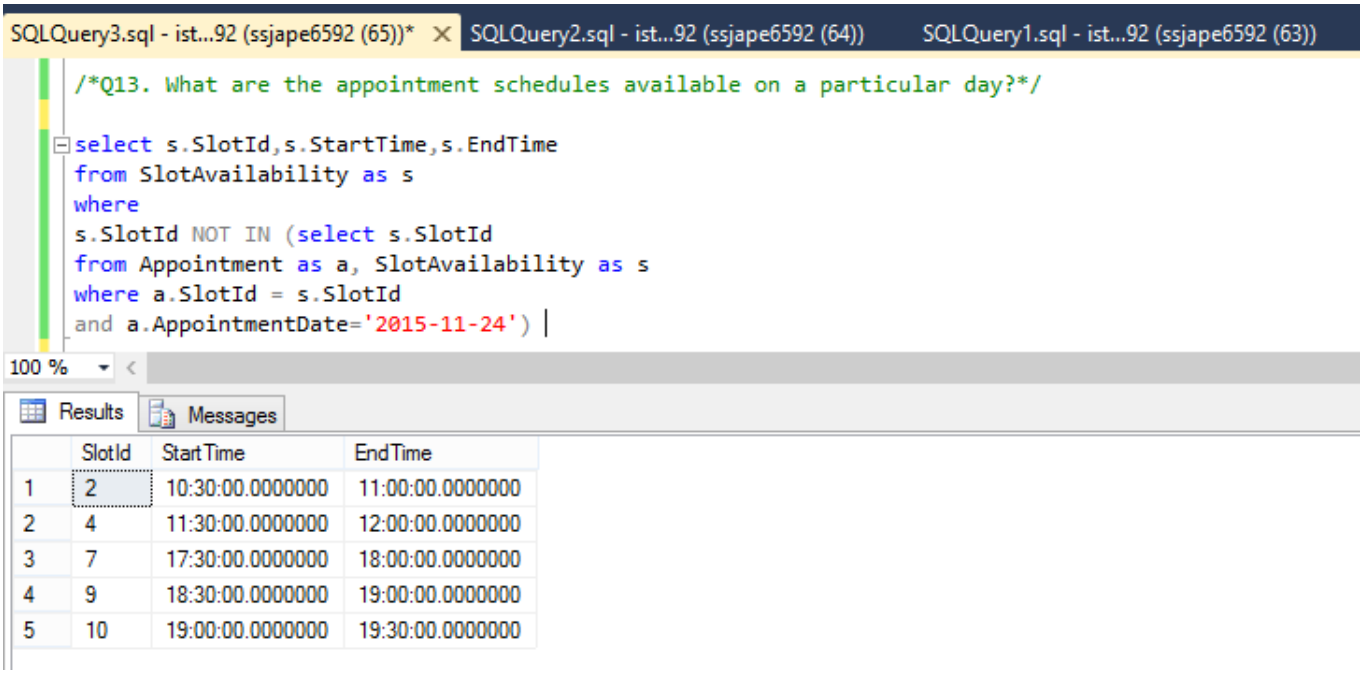
```
select d.DoctorFName, d.DoctorLName, d.DoctorDescr, d.DoctorHospId, h.HospitalName,
a.AppointmentDate, a.AppointmentTime
from Doctor as d, Hospital as h, Appointment as a
where d.DoctorId=a.AppointmentDoctorId
and h.HospitalId=d.DoctorHospId
and d.DoctorFName='Andy' and d.DoctorLName='Bichel'
order by a.AppointmentDate
```



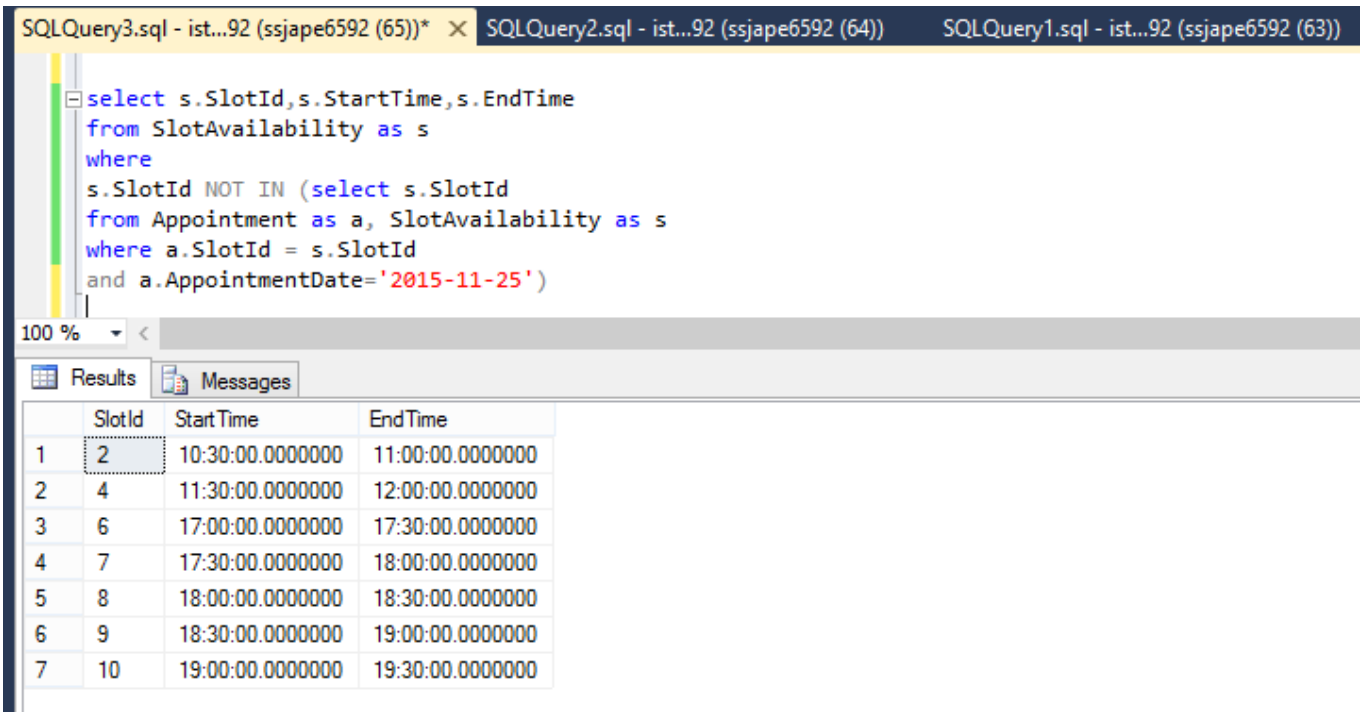


Q13. What are the appointment schedules available on a particular day?

```
select s.SlotId,s.StartTime,s.EndTime
from SlotAvailability as s
where
s.SlotId NOT IN (select s.SlotId
from Appointment as a, SlotAvailability as s
where a.SlotId = s.SlotId
and a.AppointmentDate='2015-11-24')
```

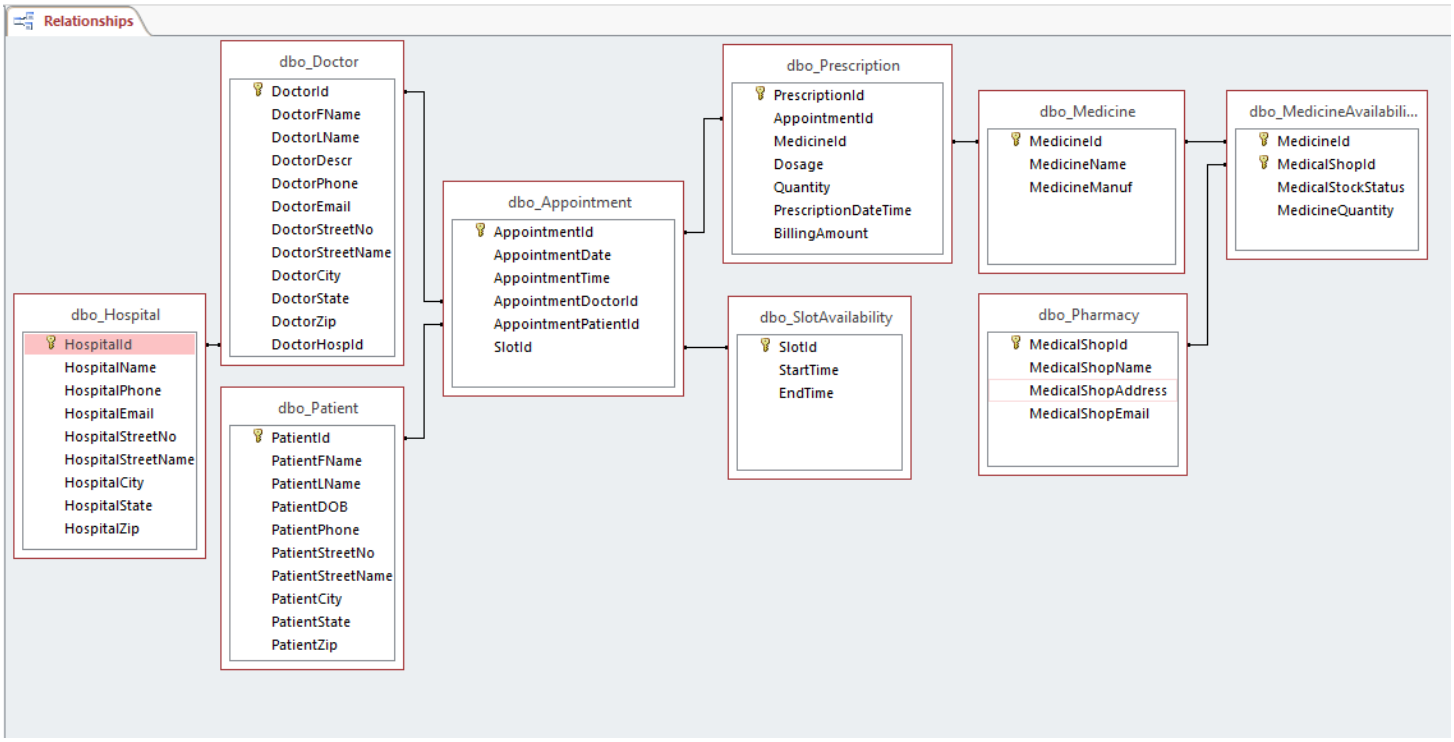


	SlotId	StartTime	EndTime
1	2	10:30:00.0000000	11:00:00.0000000
2	4	11:30:00.0000000	12:00:00.0000000
3	7	17:30:00.0000000	18:00:00.0000000
4	9	18:30:00.0000000	19:00:00.0000000
5	10	19:00:00.0000000	19:30:00.0000000



	SlotId	StartTime	EndTime
1	2	10:30:00.0000000	11:00:00.0000000
2	4	11:30:00.0000000	12:00:00.0000000
3	6	17:00:00.0000000	17:30:00.0000000
4	7	17:30:00.0000000	18:00:00.0000000
5	8	18:00:00.0000000	18:30:00.0000000
6	9	18:30:00.0000000	19:00:00.0000000
7	10	19:00:00.0000000	19:30:00.0000000

RELATIONSHIP DIAGRAM:



FRONT END FORMS

The Patient Care Management System has 2 kinds of users-

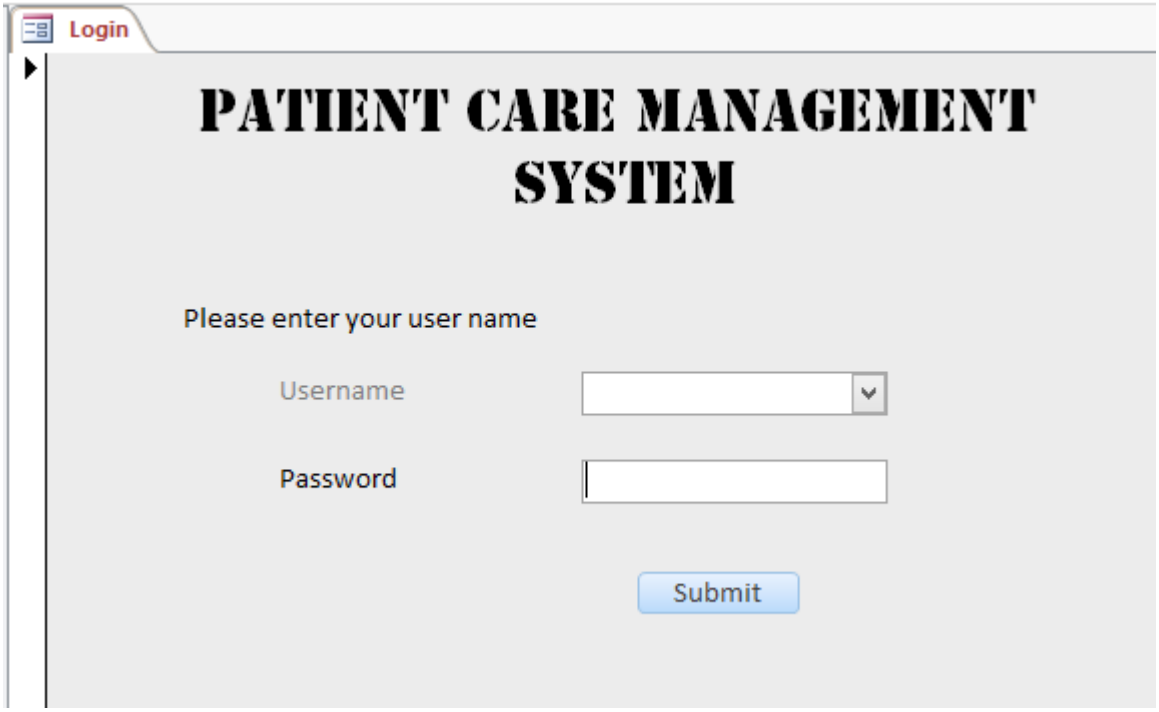
a) Admin Users – They have admin access rights to the database and can Read/Write to the Database.
b) Normal Users- They are registered users and have only Read only access to the Database.

The user details are stored in a table called: UserDetails, which consists of the following fields:

UserDetails

UserId	Username	Password	Usertype	First Name	Last Name
1	ssjape	***	Admin	Saurabh	Jape
2	ssjape1	***	User	Saurabh	S Jape
3	ronaldo	***	Admin	Cristiano	Ronaldo
4	rooney	***	User	Wayne	Rooney

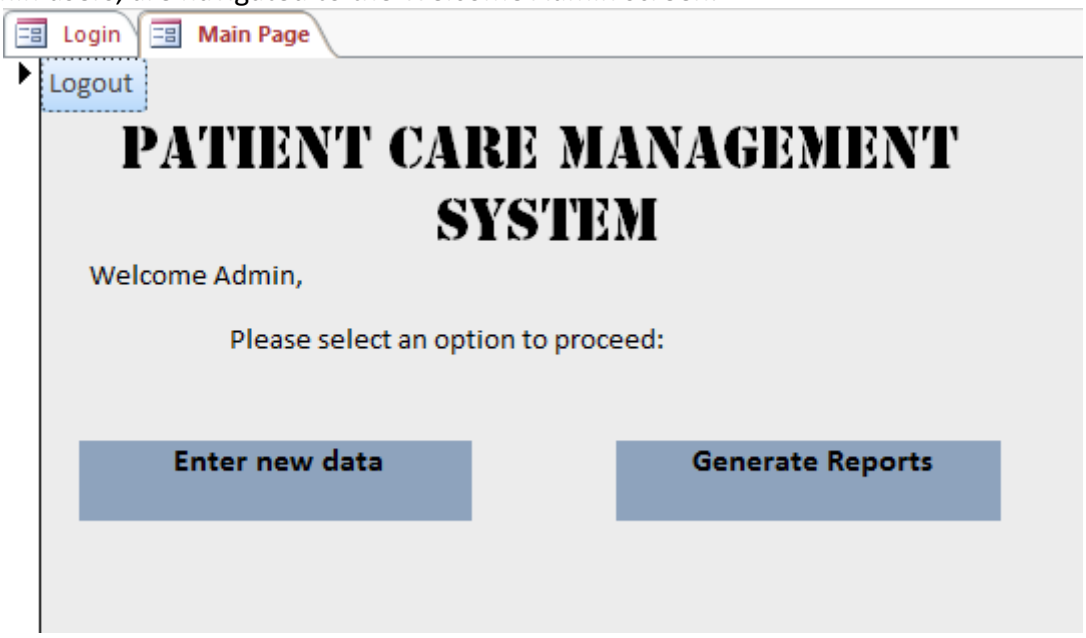
User logins into the system through the login screen.



Depending on the type of user that is logging into the system, the system navigates to the corresponding user screen.

A) ADMIN USER:

The admin users, are navigated to the Welcome Admin screen.

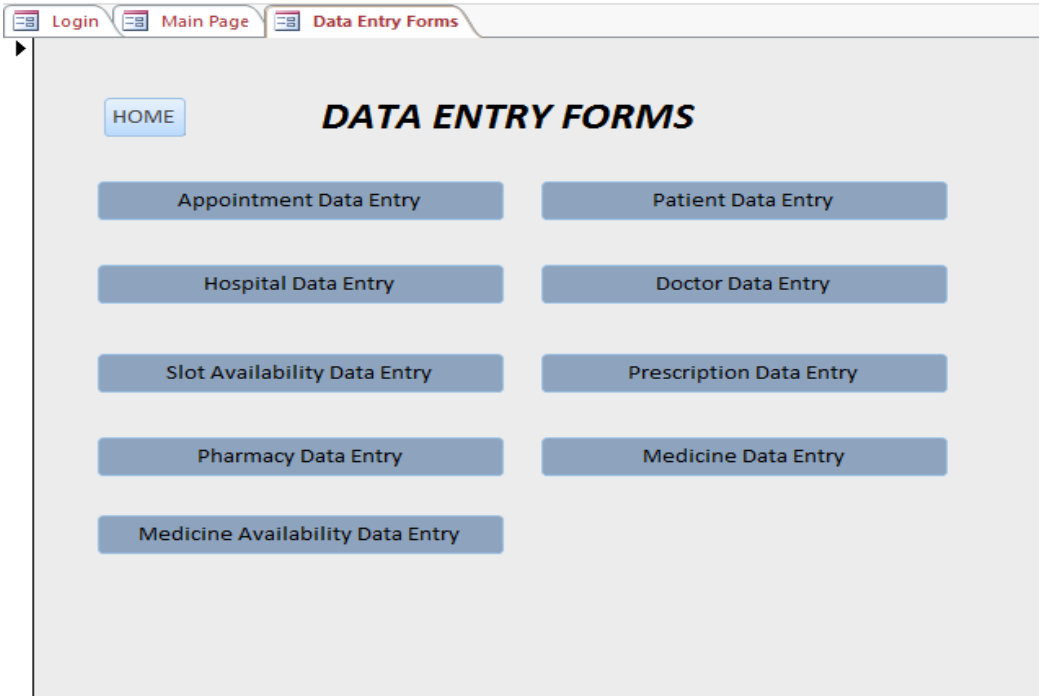


Once logged in, Admin users, have the following options-

i. Insert new data into the table using data forms
ii. Generate Reports

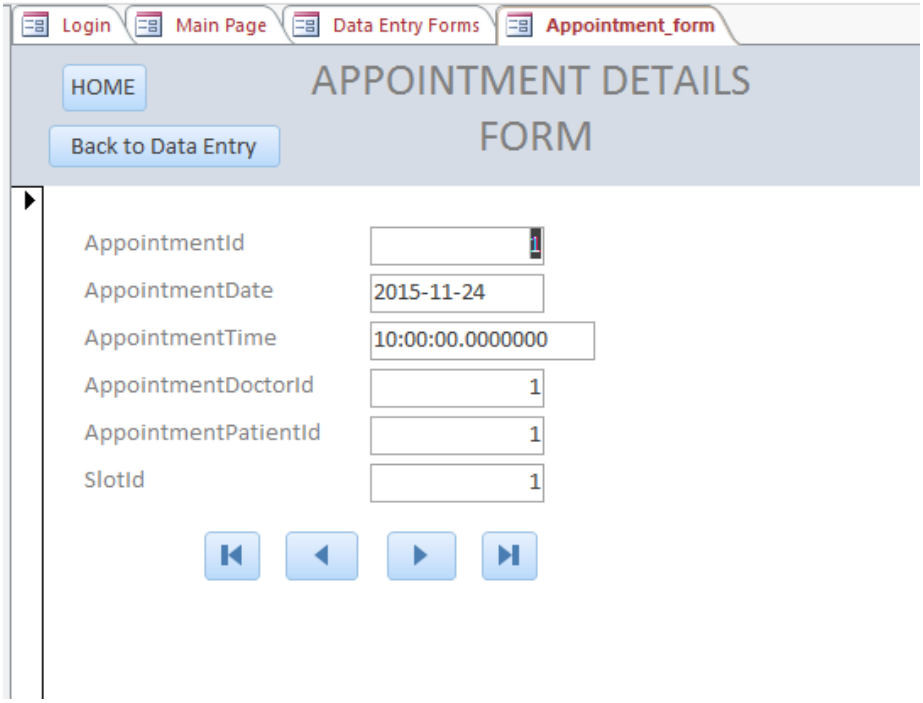
STEP 1: Click on Enter new data.

The user is navigated to the data entry form UI. The admin can now insert, edit ad delete data using this form.

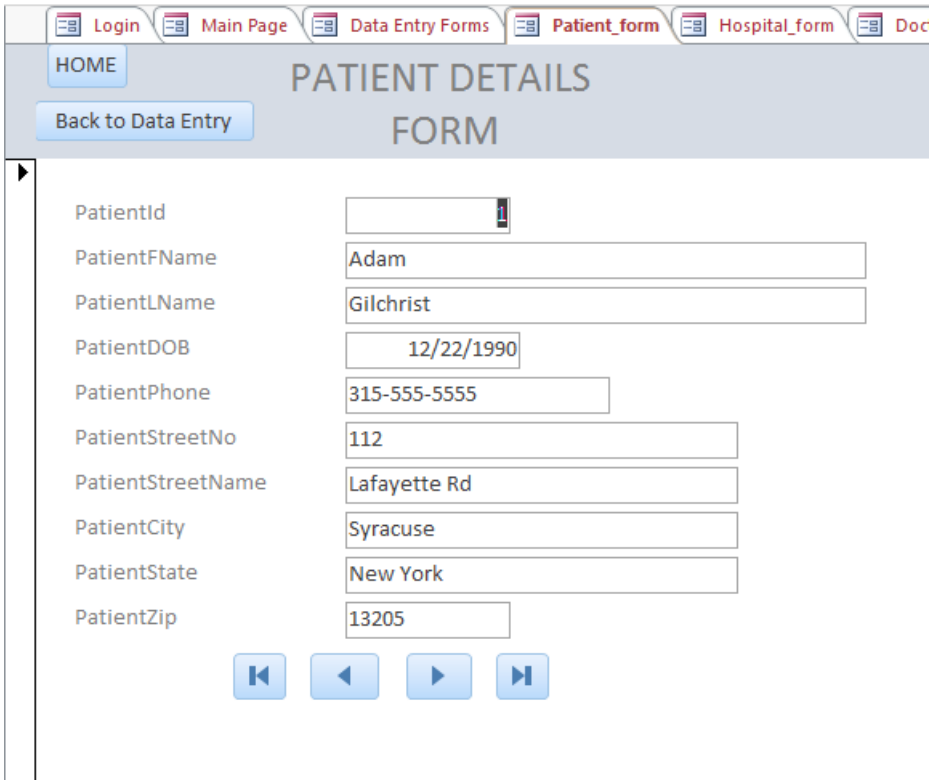


DATA ENTRY FORMS

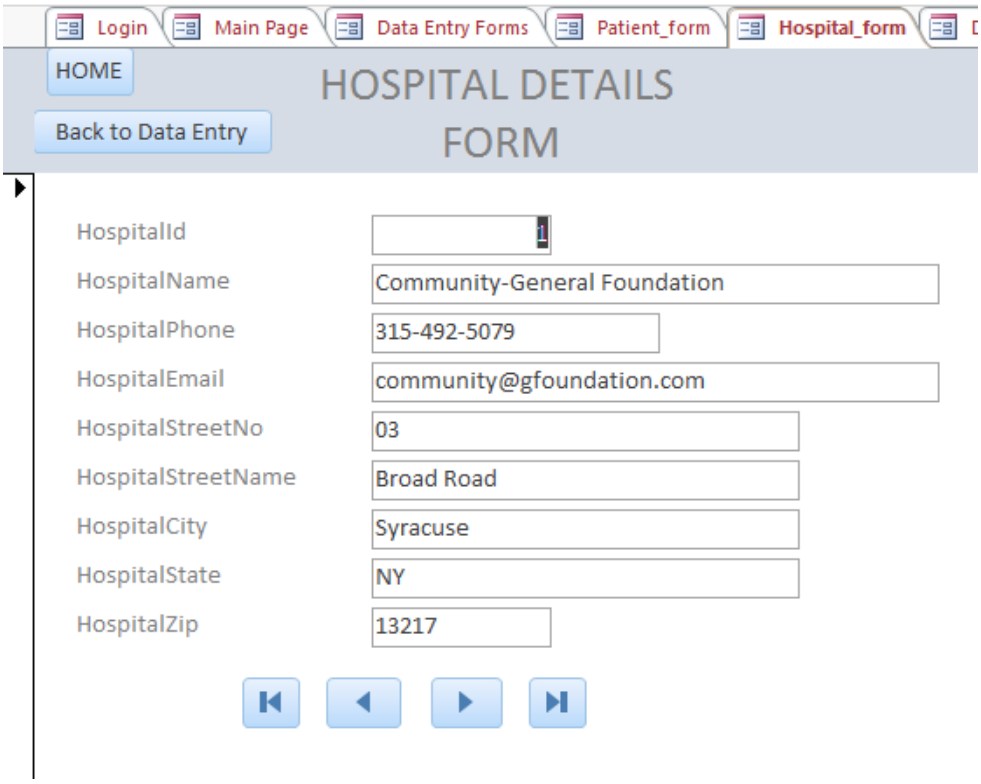
1. Appointment Details Form



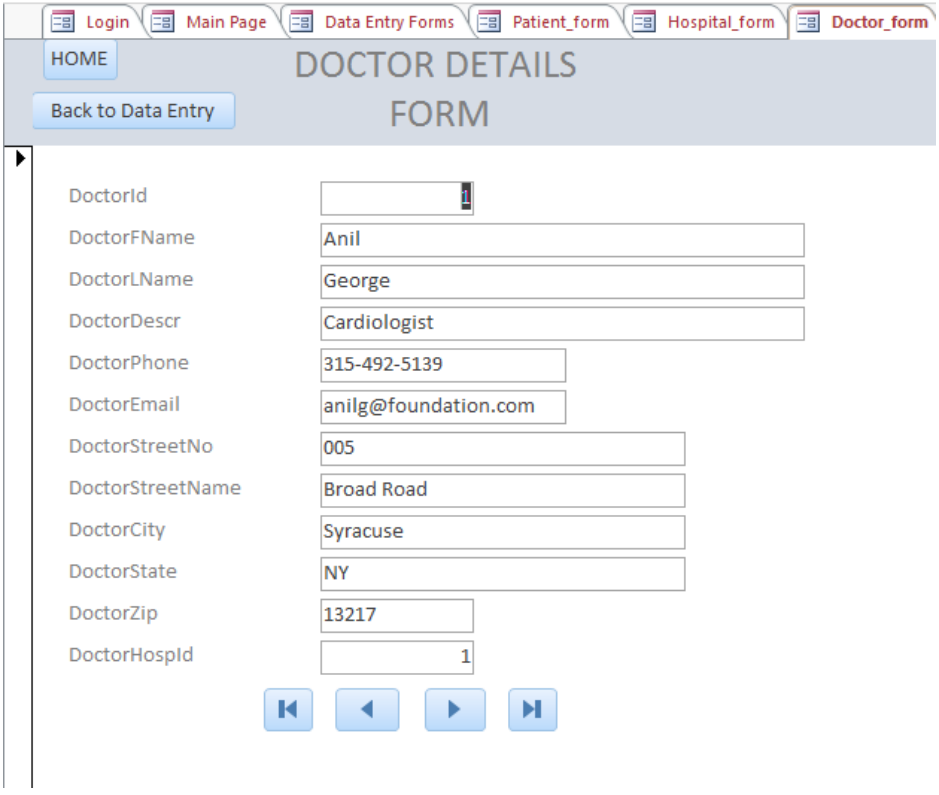
2. Patient Details Form



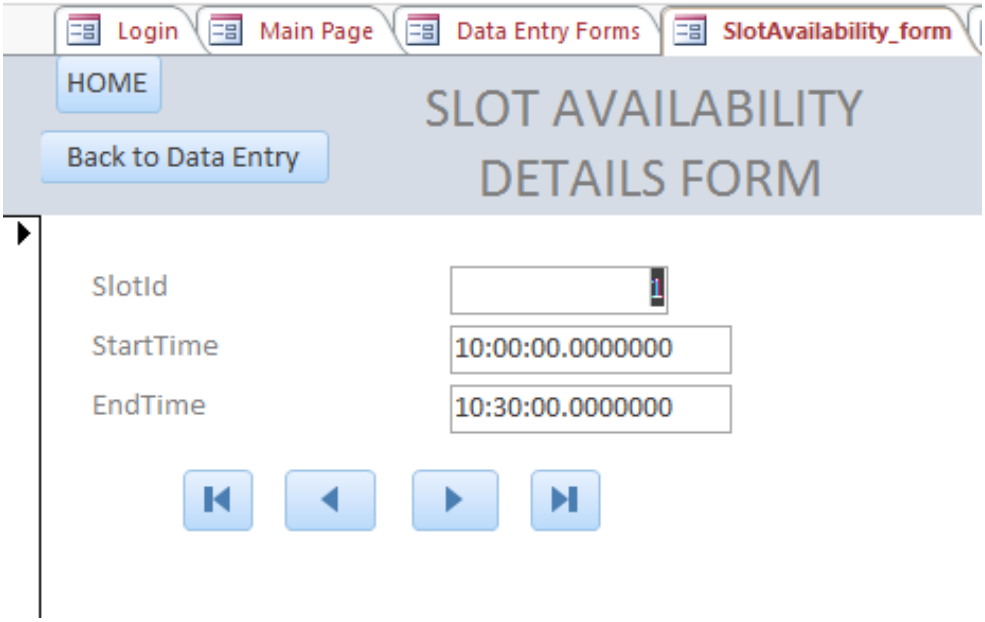
3. Hospital Details Form



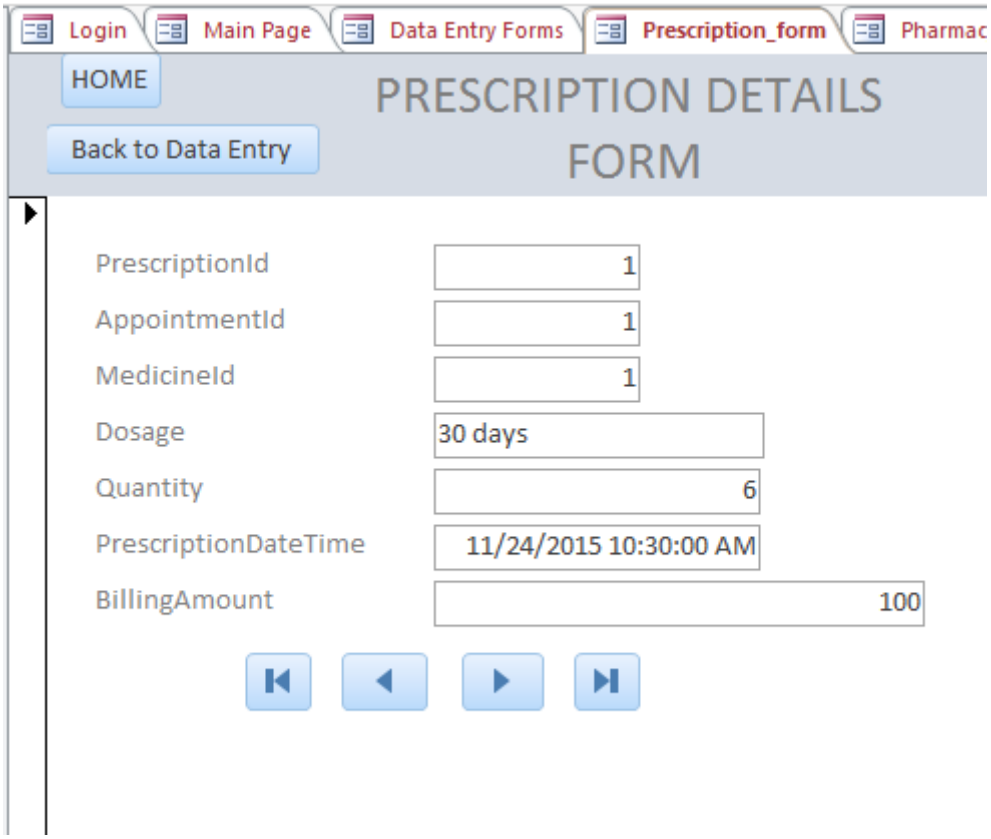
4. Doctor Details Form



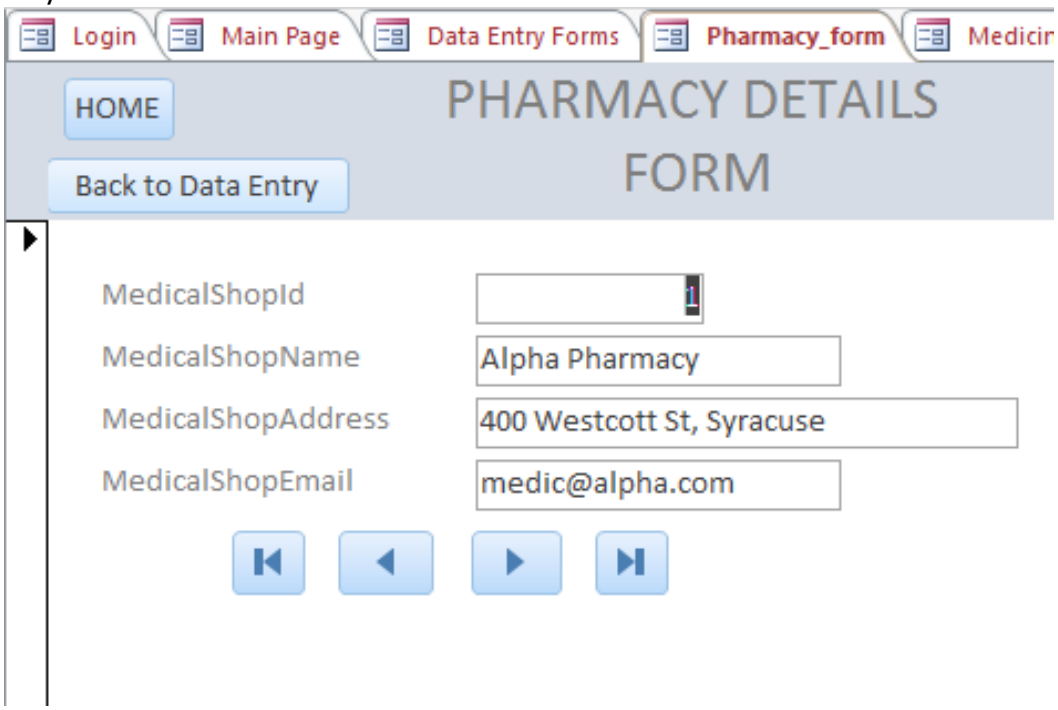
5. Slot Availability Details From



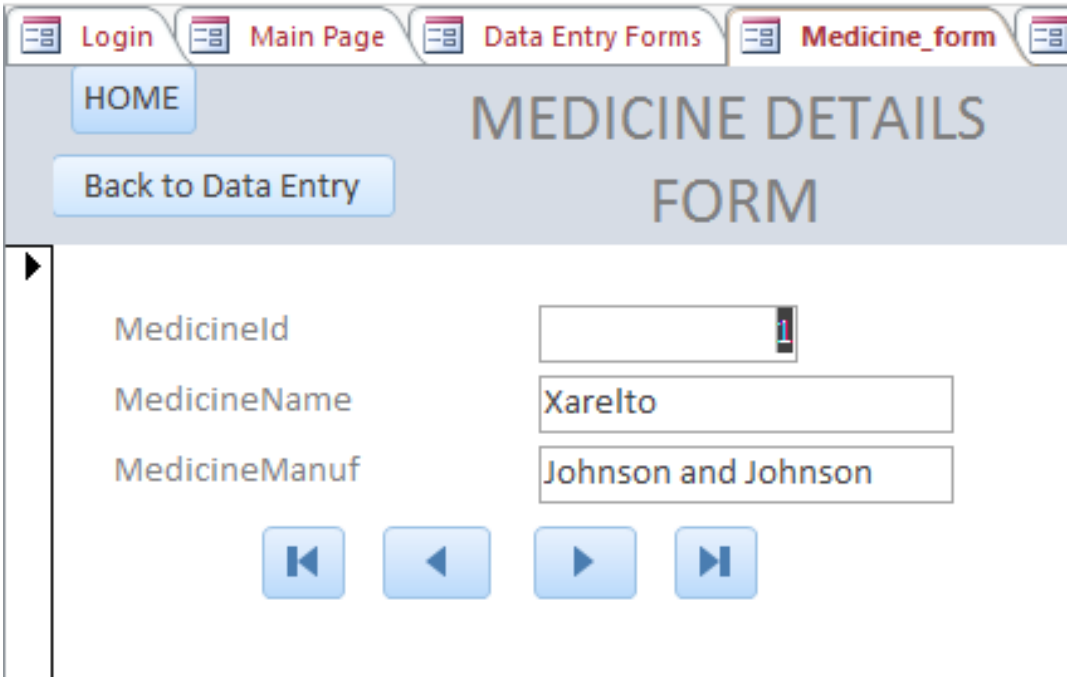
6. Prescription Details Form



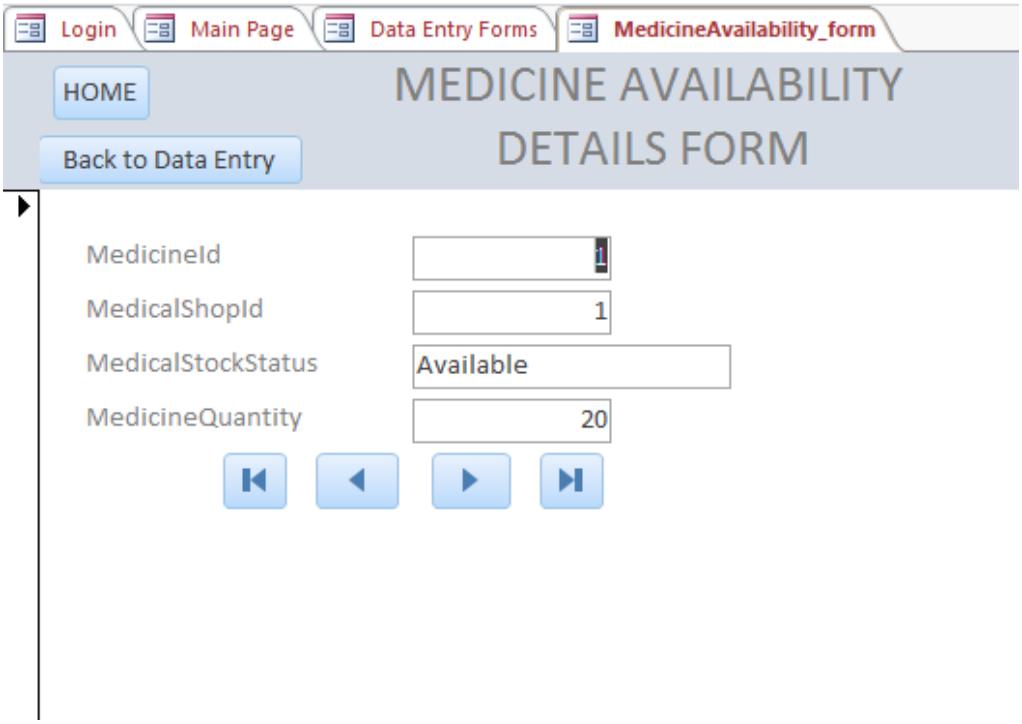
7. Pharmacy Details Form



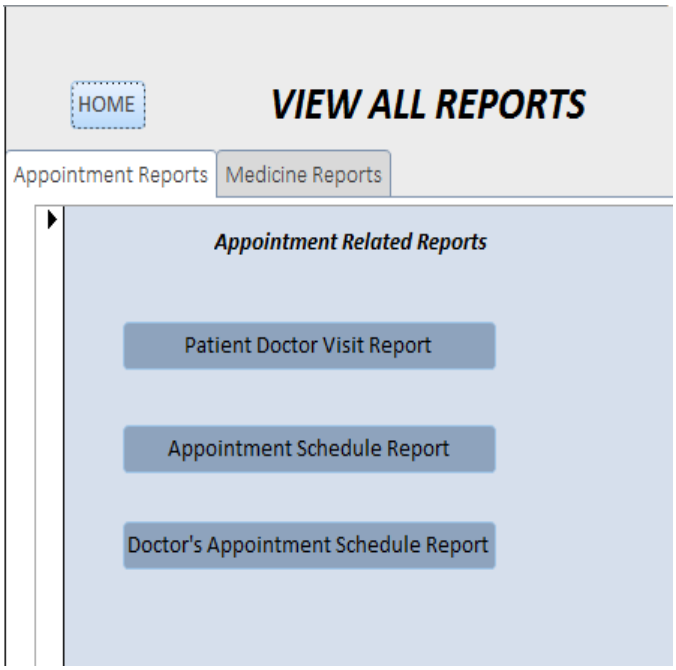
8. Medicine Details Form

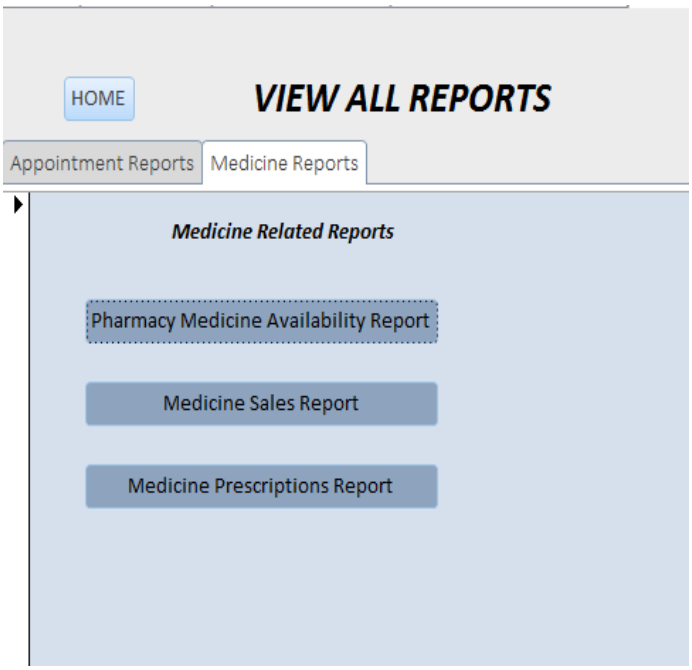


9. Medicine Availability Details Form



STEP 3: Go back to the Admin Home Page and click on Generate Reports.





The admin can view 2 types of reports:

i. Appointment Related Reports- These reports are generated based on the appointment schedule of patients and doctors availability.

ii. Medicine Related Reports- These reports are generated based on the medicine, pharmacy and stock details.

REPORT GENERATION:

1) Patient Doctor Visits Report

Report of the Number of times a Patient visits the doctor

PatientId	PatientFName	PatientLName	Number of Doctor Visits
1	Adam	Gilchrist	1
2	Sachin	Tendulkar	2
3	Sourav	Ganguly	1
4	Rahul	Dravid	2
5	Virendar	Sehwag	2
6	Ricky	Ponting	2
7	Mahendra	Dhoni	2
8	Mathew	Hayden	3
9	Shane	Warne	2
10	Daniel	Vettori	2
11	Kumar	Sangakarra	2
12	Alan	Donald	2

Sunday, November 15, 2015 Page 1 of 1

2) Appointment Schedule Report

Report to generate the appointment schedule

Appointment Id	Appointment Date	Start Time	End Time	Patient's First Name	Patient's Last Name	Doctor's First Name	Doctor's Last Name
1	2015-11-24	10:00:00.0	10:30:00.0	Adam	Gilchrist	Anil	George
2	2015-11-24	11:00:00.0	11:30:00.0	Sachin	Tendulkar	Jeff	Norman
3	2015-11-24	12:00:00.0	12:30:00.0	Sourav	Ganguly	Ram	Caprio
4	2015-11-24	17:00:00.0	17:30:00.0	Rahul	Dravid	Ram	Caprio
5	2015-11-24	18:00:00.0	18:30:00.0	Ricky	Ponting	Mark	Kemp
6	2015-11-25	10:00:00.0	10:30:00.0	Mahendra	Dhoni	Mark	Antony
7	2015-11-25	11:00:00.0	11:30:00.0	Virendar	Sehwag	Art	Rodney
8	2015-11-25	12:00:00.0	12:30:00.0	Mahendra	Dhoni	Andy	Bichel
9	2015-11-26	10:00:00.0	10:30:00.0	Mathew	Hayden	Art	Rodney
10	2015-11-26	11:00:00.0	11:30:00.0	Daniel	Vettori	Matt	Hardy
11	2015-11-26	12:00:00.0	12:30:00.0	Kumar	Sangakarra	George	Marsh
12	2015-11-26	17:00:00.0	17:30:00.0	Alan	Donald	Art	Rodney
13	2015-11-26	18:00:00.0	18:30:00.0	Sachin	Tendulkar	Mark	Antony
14	2015-11-27	10:00:00.0	10:30:00.0	Rahul	Dravid	Andy	Bichel
15	2015-11-27	11:00:00.0	11:30:00.0	Ricky	Ponting	Rob	Anderson

3) Doctor's Appointment Schedule Report

Report of the Doctors appointment schedule

Doctor Id	Doctor's First Name	Doctor's Last Name	Doctor's Description	Doctor's Phone	HospitalName	Appointment Date	Start Time	End Time
1	Anil	George	Cardiologist	315-492-513	Community-General	2015-11-24	10:00:00.	10:30:00.
2	Jeff	Norman	Dermatologist	315-233-413	Boce Onondaga Cortland Madison	2015-11-24	11:00:00.	11:30:00.
3	Ram	Caprio	Gynecologist	315-374-758	Crouse Hospital	2015-11-24	12:00:00.	12:30:00.
3	Ram	Caprio	Gynecologist	315-374-758	Crouse Hospital	2015-11-24	17:00:00.	17:30:00.
3	Ram	Caprio	Gynecologist	315-374-758	Crouse Hospital	2015-11-28	18:30:00.	19:00:00.
4	Mark	Kemp	Cardiology	315-212-536	Upstate University Hospital	2015-11-24	18:00:00.	18:30:00.
4	Mark	Kemp	Cardiology	315-212-536	Upstate University Hospital	2015-11-28	19:00:00.	19:30:00.
5	Art	Rodney	Orthopedist	315-847-848	Aurora Hospital	2015-11-25	11:00:00.	11:30:00.
5	Art	Rodney	Orthopedist	315-847-848	Aurora Hospital	2015-11-26	10:00:00.	10:30:00.

4) Pharmacy Medicine Availability Report

Report of medicine stock availability at each pharmacy

Medical Shop Id	MedicalShopName	Medicine Id	MedicineName	Medicine Manufacturer	Medical Stock Status	Medicine Quantity
1	Alpha Pharmacy					
		1	Xarelto	Johnson and Johnson	Available	20
		2	Benadryl	Johnson and Johnson	Available	20
2	Beta Pharmacy					
		1	Xarelto	Johnson and Johnson	Not Available	0
		6	Cipro	Bayer	Not Available	0
3	Gamma Pharmacy					
		1	Xarelto	Johnson and Johnson	Available	10
		8	Vicodin	Abbvie	Available	20
		10	Benicar	Daiichi Sankyo	Available	30
4	Psi Pharmacy					
		2	Benadryl	Johnson and Johnson	Available	20
		4	Zofran	GlaxoSmithKline	Available	20
		6	Cipro	Bayer	Available	20
		12	Fosamax	GlaxoSmithKline	Available	7
5	Epsolon Pharmacy					
		3	Avandia	GlaxoSmithKline	Available	20

5) Medicine Sales Report

Report of the number of medicines sold

MedicineId	MedicineName	Medicine Manufacturer	Medicine Quantity	Amount (in $)
1	Xarelto	Johnson and Johnson	8	140
2	Benadryl	Johnson and Johnson	7	140
3	Avandia	GlaxoSmithKline	6	120
4	Zofran	GlaxoSmithKline	1	40
7	Prozac	Eli Lilly	2	60
9	Percocet	Endo	2	60

Sunday, November 15, 2015 Page 1 of 1

6) Medicine Prescription Report

Report of Number of Doctors recommending a medicine

MedicineId	MedicineName	Medicine Manufacturer	No of doctors prescribing the medicine
3	Avandia	GlaxoSmithKline	2
2	Benadryl	Johnson and Johnson	2
9	Percocet	Endo	1
7	Prozac	Eli Lilly	1
1	Xarelto	Johnson and Johnson	2
4	Zofran	GlaxoSmithKline	1

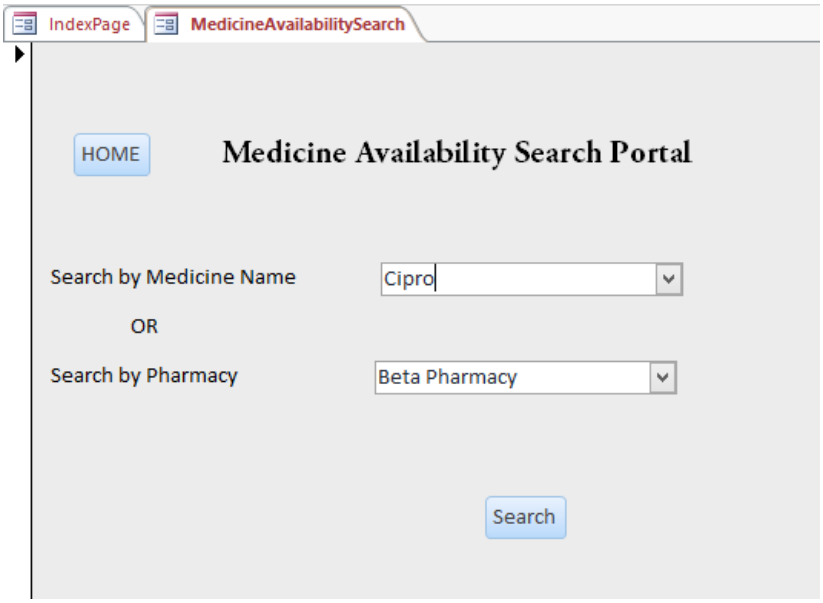
Sunday, November 15, 2015 Page 1 of 1

B) OTHER USER'S:

Once logged in, registered users, have the following options-

i. Search for a medicine: Users can search for a medicine through the medicine search portal or by the Pharmacy name.
ii. Search for a doctor's appointment: Users can search for available appointments on different Days using the search appointment portal.

1) SEARCH FOR A MEDICINE

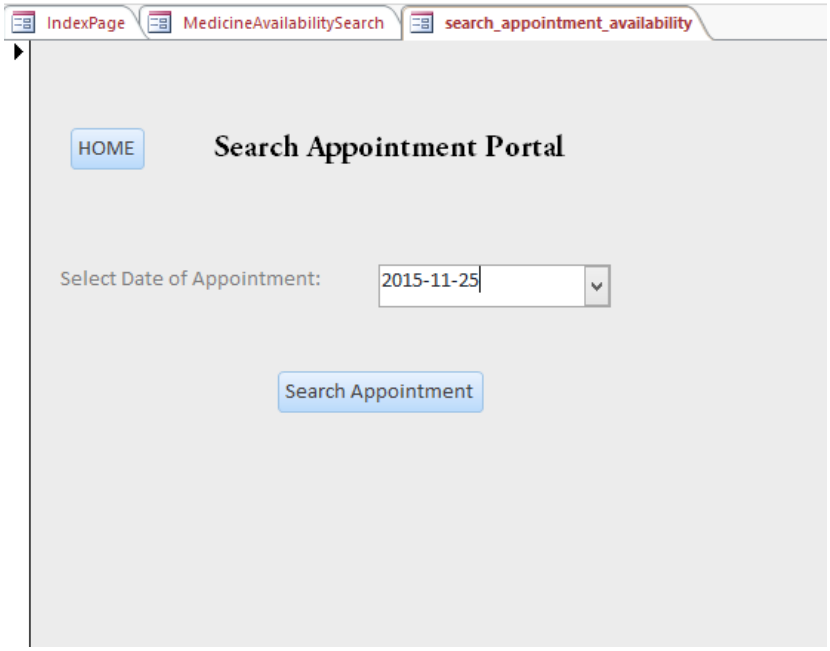


Result:

IndexPage | MedicineAvailabilitySearch | individual_medicine_availability

MedicalShop	MedicalShopName	MedicineId	MedicineNa	MedicineMa	MedicalStoc	MedicineQu
2	Beta Pharmacy	1	Xarelto	Johnson and Jc	Not Available	0
2	Beta Pharmacy	6	Cipro	Bayer	Not Available	0
4	Psi Pharmacy	6	Cipro	Bayer	Available	20

2) SEARCH FOR AN APPOINTMENT



Result:

IndexPage | MedicineAvailabilitySearch | search_appointment_availability | appoinment_availability

SlotId	StartTime	EndTime
2	10:30:00.0000000	11:00:00.0000000
4	11:30:00.0000000	12:00:00.0000000
6	17:00:00.0000000	17:30:00.0000000
7	17:30:00.0000000	18:00:00.0000000
8	18:00:00.0000000	18:30:00.0000000
9	18:30:00.0000000	19:00:00.0000000
10	19:00:00.0000000	19:30:00.0000000

4. CONCLUSION

Thus, as discussed in the Project Report, the Patient Care Management System would be extremely useful as it helps answering the questions of various stakeholders.

- The Patient Care Management System database, will help customers find specific doctors availability so that they can schedule appointments and search for medicine availability at the nearest pharmacy.

- The database also helps the organization track doctor's availability, the reporting of what dosages of medications were administered to patients, medicine stock availability etc.

- The Patient Care Management System, would thus, serve to replace the paper documents, file folders, and filing cabinets of old making it much more convenient and immediate.

- Maintaining a database, thus not only helps customers with fulfilling their needs, but also helps government organization and health monitoring agencies generate reports on the nature of disease, pattern of illness etc.