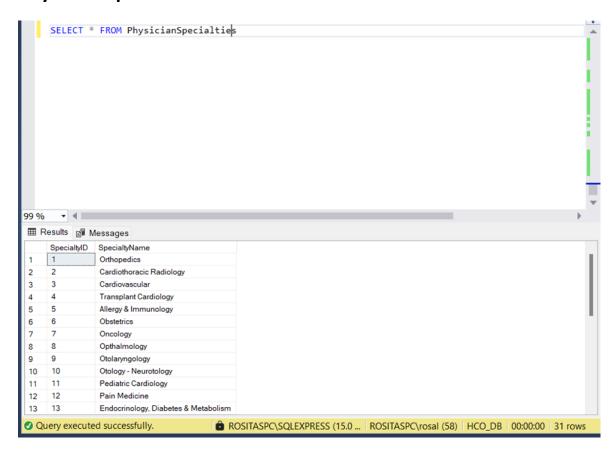
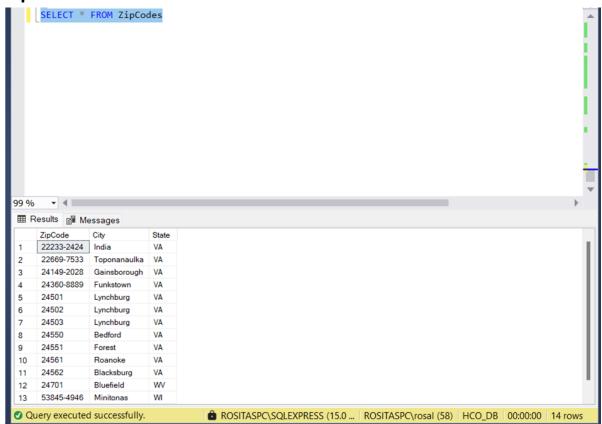
Step 2:

Select statements for each table:

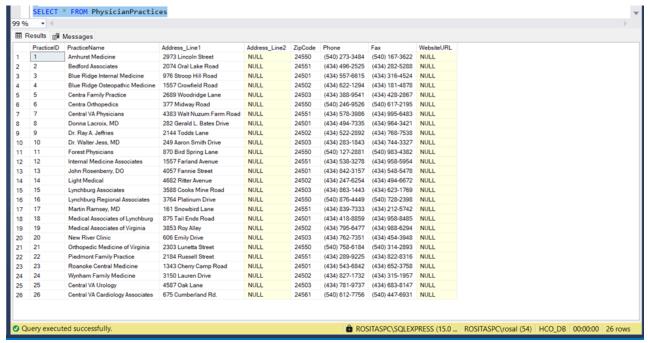
Physician Specialties:



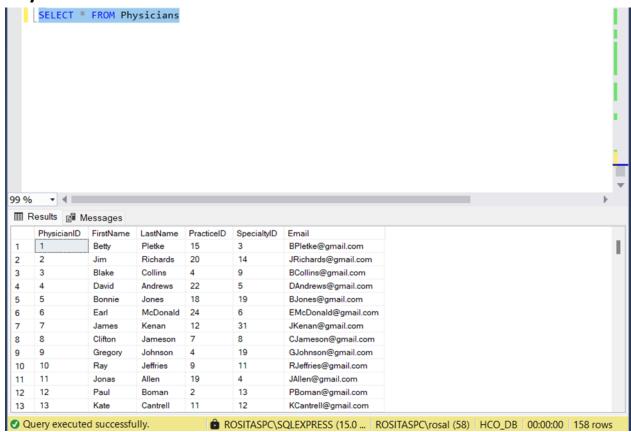
ZipCodes:



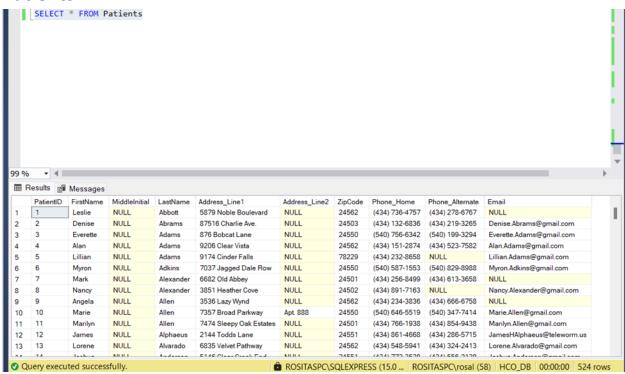
Physician Practices:



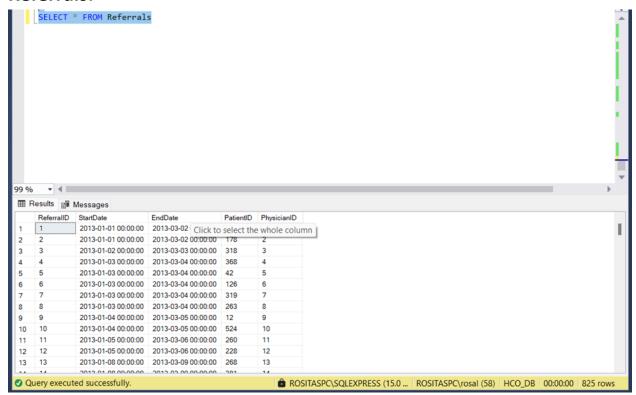
Physicians:



Patients:



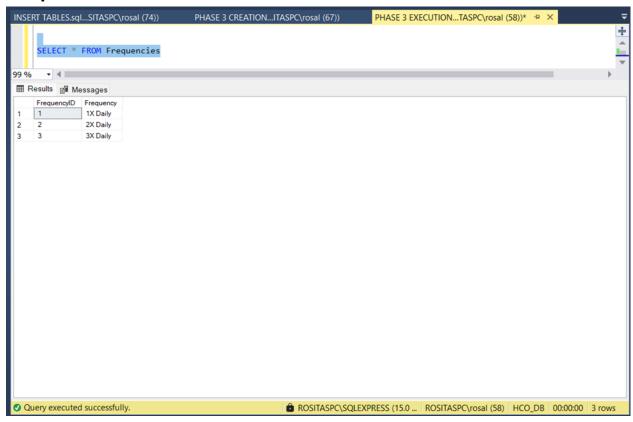
Referrals:



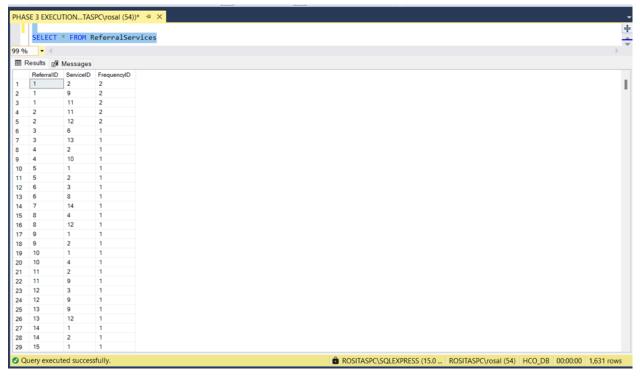
Services:



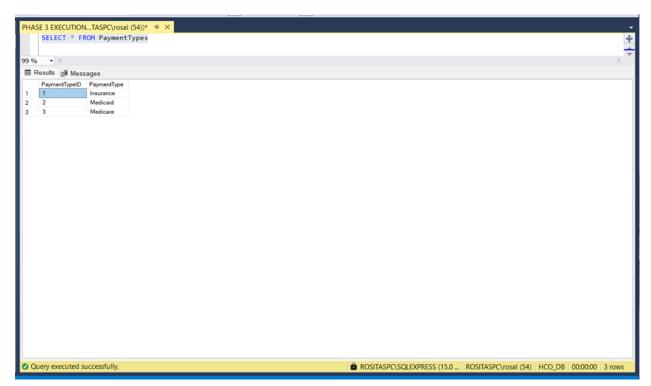
Frequencies:



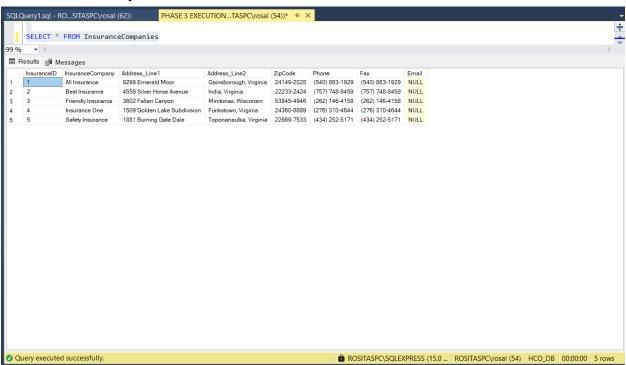
Referral Services:



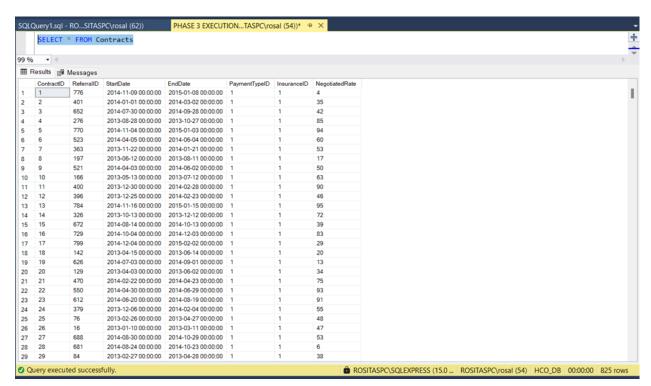
PaymentTypes:



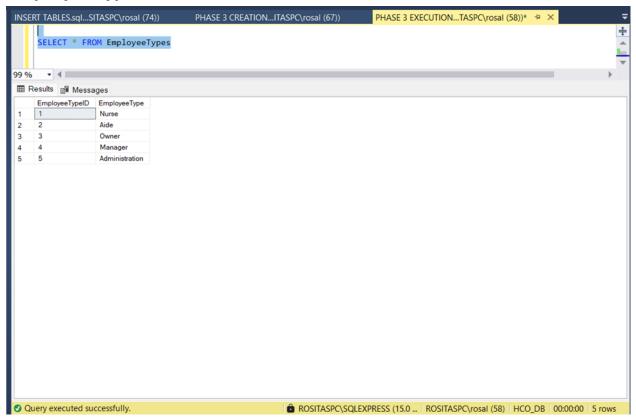
InsuranceCompanies:



Contracts:



EmployeeTypes:

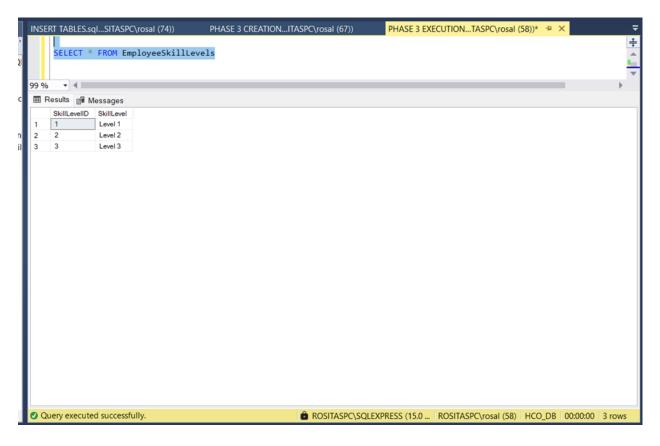


EmployeeTitles:

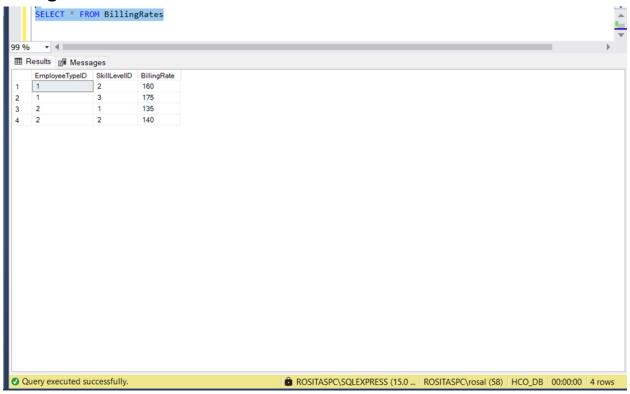
```
SQLQuery1.sql - RO...SITASPC\rosal (62)) PHASE 3 EXECUTION...TASPC\rosal (54))* 😕 X
       SELECT * FROM EmployeeTitles
EmployeeTitleID EmployeeTitle

1 LPN-1
                        LPN-3
LPN-4
                        RN-1
                        RN-2
                        RN-4
      10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
                        RN-5
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
                        RN-6
                        RN-7
                        A-2
A-3
                        A-5
A-6
                        A-7
                        Owner
                        Office Manager
                        Receptionist
                        Accountant
                        Bookkeeper
                        Assistant
                        Nursing Supervisor
Query executed successfully.
                                                                                                                   ROSITASPC\SQLEXPRESS (15.0 ... | ROSITASPC\rosal (54) | HCO_DB | 00:00:00 | 26 rows
```

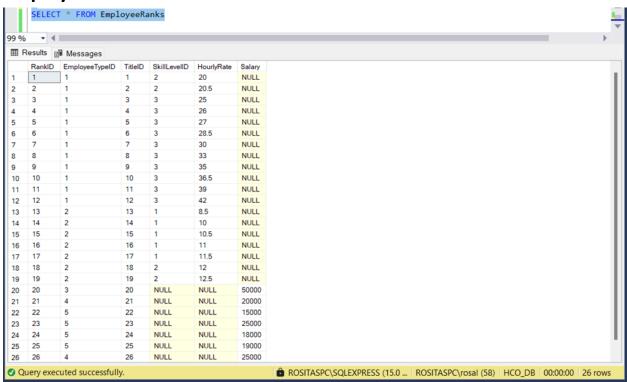
EmployeeSkillLevels:



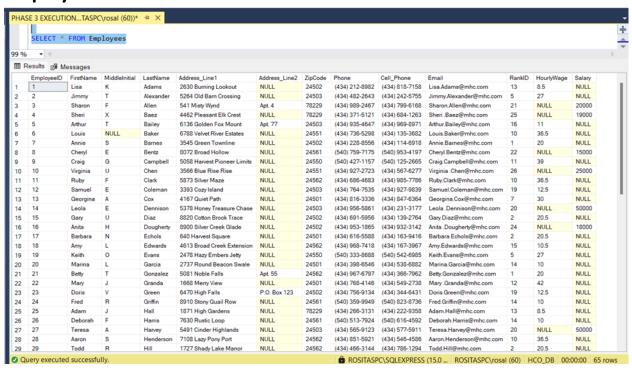
BillingRates:



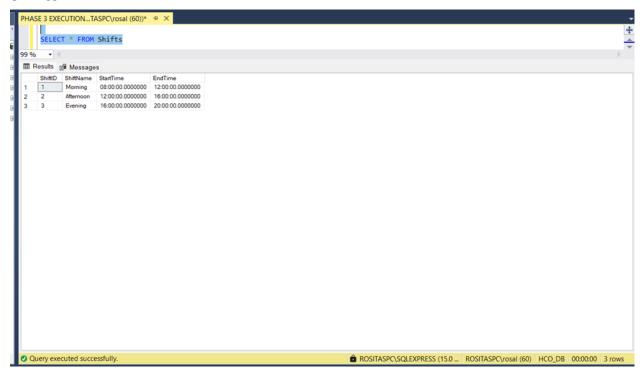
EmployeeRanks:



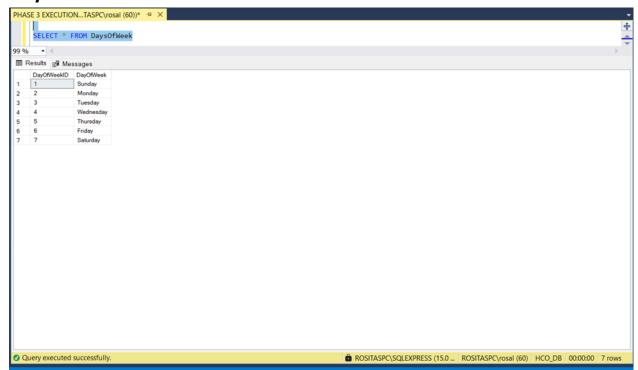
Employees:



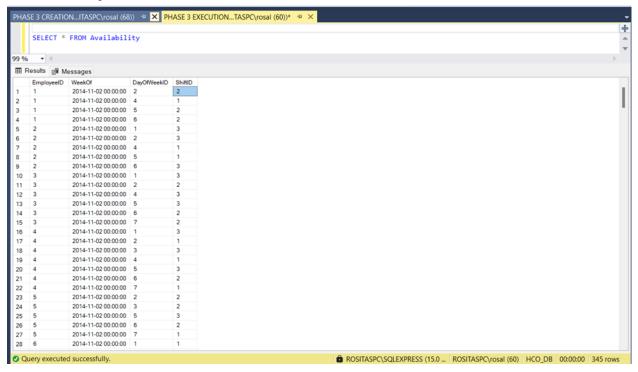
Shifts:



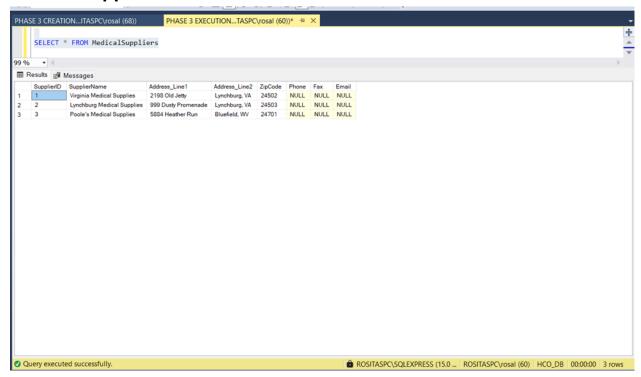
DaysOfWeek:



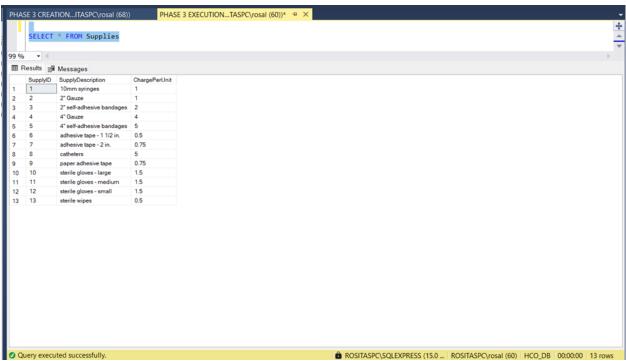
Availability:



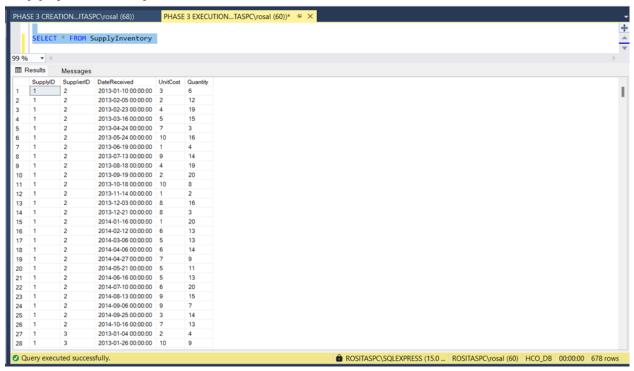
MedicalSuppliers:



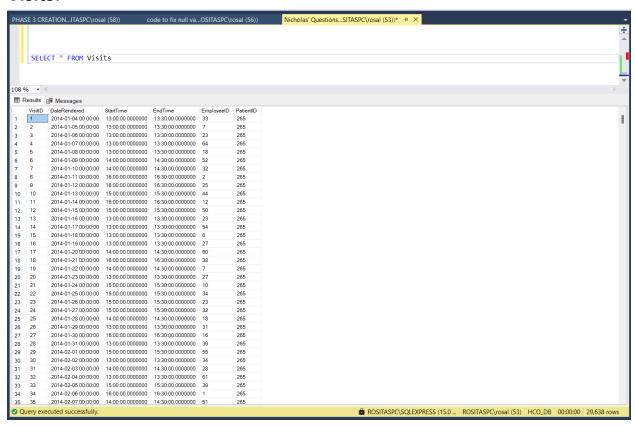
Supplies:



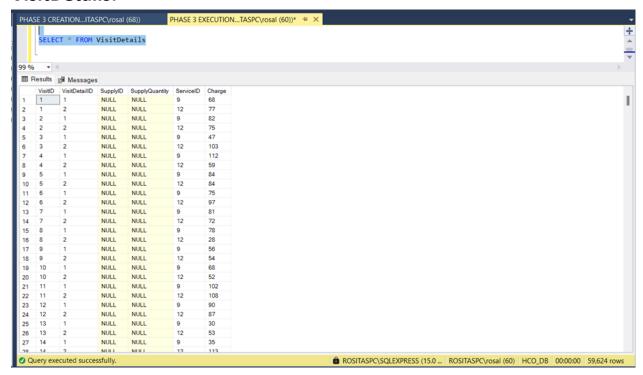
SupplyInventory:



Visits:



VisitDetails:



Step 3:

Write and execute the queries below to answer each question. As in your labs, be sure to write out your query in Word and then take a screenshot of the results after execution of each query.

The screenshots are below the table of queries, labeled as to which question they are attributed to.

Each query is worth 2 points. (Total of 72 points)

Data loaded into tables is worth 28 points.

Write and execute queries to perform the following functions:

Criteria	Output Format	Solution
1. Display a list of all patients who have a last name beginning with the letter "P".	Patient Last Name, followed by a comma and a space, followed by the patient's first name. (e.g. Poole, Melesa) Sort order: Patient Last Name - ascending	select CONCAT(p.LastName,', ', p.FirstName) 'Patients' from Patients p where p.LastName like 'p%' order by p.LastName ASC
2. Display a list of all patients who have an	Patient First Name, followed by a space, followed by the patient's last name. (e.g.	

alternate/cell phone number 3. Display a list of all patients who do not have an email address.	Melesa Poole), alternate/cell phone number Sort order: Patient First Name – ascending Patient Last Name – ascending Patient First Name, followed by a space, followed by the patient's last name. (e.g. Melesa Poole) Sort order: Patient First Name – ascending Patient Last Name – ascending	select concat(p.FirstName,' ',p.LastName) as 'Patients', p.Phone_Alternate from Patients p where p.Phone_Alternate is not null order by p.FirstName asc, p.LastName asc select concat(p.FirstName,' ', p.LastName) as 'Patients' from Patients p where Email is null order by p.FirstName asc, p.LastName asc
4. Display a list of all patients who live in zipcode 24551.	Patient Last Name, Address1, Address2, City, State, Zip Sort order: Patient Last Name – descending	select p.LastName, p.Address_Line1, p.Address_Line2, z.City, z.State, z.ZipCode from Patients p inner join ZipCodes z on p.ZipCode = z.ZipCode where p.ZipCode = '24551' order by p.LastName desc
5. Display a list of all physicians whose specialty is Internal Medicine or Orthopedics	Physician First Name, space, last name (call this column Physician), Specialty Sort order: Physician First Name – ascending Physician Last Name – descending	select concat(ph.FirstName, ' ',ph.LastName) as 'Physician', ps.SpecialtyName from Physicians ph inner join PhysicianSpecialties ps on ph.SpecialtyID = ps.SpecialtyID where ps.SpecialtyName = 'Internal Medicine' or ps.SpecialtyName = 'Orthopedics' order by ph.FirstName asc, ph.LastName desc
6. Display a list of all physicians, their specialties, and their practices	Physician Last Name, Specialty, Practice Sort order: Physician Specialty — ascending Physician Last Name — ascending Practice — ascending	select ph.LastName, ps.SpecialtyName, pp.PracticeName from Physicians ph inner join PhysicianSpecialties ps on ph.SpecialtyID = ps.SpecialtyID inner join PhysicianPractices pp on ph.PracticeID = pp.PracticeID order by ps.SpecialtyName asc, ph.LastName asc, pp.PracticeName asc
7. Display a list of all physicians	Physician Last Name, Practice Name, Address, City, State, Zipcode, Phone	

whose practices are in Lynchburg	Sort order: Zipcode – ascending Practice Name – descending Physician Last Name – ascending	select p.LastName, pp.PracticeName, pp.Address_Line1, z.City, z.State, z.ZipCode, pp.Phone from Physicians p inner join PhysicianPractices pp on p.PracticeID = pp.PracticeID inner join ZipCodes z on pp.ZipCode = z.ZipCode where z.City = 'Lynchburg' order by z.ZipCode asc, pp.PracticeName desc, p.LastName asc
8. Display the number of physicians in each specialty	Specialty, number of physicians in each specialty Sort order: Specialty	select ps.SpecialtyName, count(p.PhysicianID) as 'Number of Physicians' from Physicians p inner join PhysicianSpecialties ps on p.SpecialtyID = ps.SpecialtyID group by SpecialtyName order by SpecialtyName
9. Display the number of physicians in each practice, broken out by specialty	Practice, Specialty, number of physicians in each Sort order: Practice – ascending Specialty ascending	select pr.practiceName 'Practice Name', s.SpecialtyName 'Specialty Name', COUNT(p.PracticeID) as '# of Physicians in Practice' from Physicians p inner join PhysicianPractices pr on pr.PracticeID = p.PracticeID inner join PhysicianSpecialties s on s.SpecialtyID = p.SpecialtyID group by pr.PracticeName, s.SpecialtyName order by PracticeName ASC, SpecialtyName ASC
10. Display the list of specialties that have no physicians assigned to them.	Specialty Sort order: Specialty – ascending	select s.SpecialtyName 'Specialty Name', s.SpecialtyID from PhysicianSpecialties s where SpecialtyID NOT IN (select SpecialtyID from Physicians) order by SpecialtyName ASC

11. Display a list of all referrals whose start date was in 2013. 12. Display a list of all the referrals whose start date	Patient first name, followed by a space, followed by patient last name (Call this whole field "Patient Name"), Referring Physician Last Name (call this field "Physician"), StartDate, EndDate Sort Order: StartDate – ascending Patient First Name – ascending Physician Last Name - ascending Physician Last Name - ascending Physician Last Name - ascending	select CONCAT(pa.firstName, '', pa.lastName) 'Patient Name', ph.lastName 'Physician', r.StartDate, r.EndDate from Referrals r inner join Patients pa on r.PatientID = pa.PatientID inner join Physicians ph on r.PhysicianID = ph.PhysicianID where year(r.StartDate) = 2013 order by StartDate ASC, pa.FirstName ASC, ph.LastName ASC select CONCAT(pa.firstName, '', pa.lastName) 'Patient Name', ph.lastName 'Physician', r.StartDate,
is between	Physician Last Name (call this field	r.EndDate from Referrals r
October 1, 2014	"Physician"), StartDate, EndDate	inner join Patients pa on r.PatientID =
and November 5,	Sort Order: StartDate – ascending	pa.PatientID
2014	Patient First Name –	inner join Physicians ph on
	ascending	r.PhysicianID = ph.PhysicianID
	Physician Last Name -	where r.StartDate between
	ascending	'10/01/2014' and '11/05/2014'
		order by r.StartDate ASC, pa.FirstName
		ASC, ph.LastName ASC
13. Display the number of	Physician Last name, Physician First Name, number of referrals	select ph.lastName, ph.FirstName, COUNT(r.PhysicianID) as '# of Referrals'
referrals given by	Sort Order: Physician Last Name –	from Referrals r
each physician	ascending	inner join Physicians ph on
	Physician First Name –	r.PhysicianID = ph.PhysicianID
	ascending	group by ph.LastName, ph.FirstName order by ph.LastName ASC,
		ph.FirstName ASC
14. List the	Service name, number of referrals	select s.ServiceName,
number of referrals in 2014	Sort order: Service name	COUNT(rs.ServiceID) as '# of Referrals' from Referrals r
for each service		inner join ReferralServices rs on
requested.		r.ReferralID = rs.ReferralID
		inner join Services s on s.ServiceID =
		rs.ServiceID
		where r.StartDate between
		'01/01/2014' and '12/31/2014' and
		r.EndDate between '01/01/2014' and '12/31/2014'
		group by s.ServiceName
		order by s.ServiceName
15. Display a list	Patient Last Name, Patient First Name	
of all patients	Sort order: Patient last name –	select p.LastName, p.FirstName from
	ascending	Referrals r

requiring exercise	Patient first name –	
therapy in 2013	ascending	inner join Patients p on p.PatientID =
		r.PatientID
		inner join ReferralServices rs on
		r.ReferralID = rs.ReferralID
		inner join Services s on s.ServiceID =
		rs.ServiceID
		where s.ServiceName = 'Exercise
		Therapy' and r.StartDate between
		'01/01/2013' and '12/31/2013'
		order by p.LastName ASC, p.FirstName
		ASC
16. Display a list	Patient Last Name, Physician Last Name,	select pa.LastName as 'Patient Last
of any referrals	referral start date	Name', ph.LastName as 'Physician Last
that require "Insulin	Sort order: Physician Last Name – ascending	Name', r.StartDate as 'Referral Start Date' from Referrals r
injections" and	Patient Last Name –	inner join Patients pa on pa.PatientID =
"2x Daily" is NOT	ascending	r.PatientID
listed as their	Referral Start Date –	inner join Physicians ph on
frequency.	ascending	ph.PhysicianID = r.PhysicianID
		inner join ReferralServices rs on
		rs.ReferralID = r.ReferralID
		inner join Services s on s.ServiceID =
		rs.ServiceID
		inner join Frequencies f on f.FrequencyID = rs.FrequencyID
		where ServiceName = 'Insulin
		Injections' and Frequency <> '2X Daily'
		order by ph.LastName, pa.LastName,
		r.StartDate
17. Display the	Patient Last Name, Physician Last Name,	select pa.LastName as 'Patient Last
contracts and	Referral Start Date, Contract Start Date,	Name', ph.LastName as 'Physician Last
payment	Payment Method	Name', r.StartDate as 'Referral Start
methods	Sort Order: Payment Method -	Date', c.StartDate as 'Contract Start
associated with each referral	ascending Physician Last Name	Date', PaymentType as 'Payment Method' from Contracts c
eachiteleffal	Physician Last Name – ascending	inner join Referrals r on r.ReferralID =
	Patient Last Name –	c.ReferralID
	ascending	inner join PaymentTypes pt on
	Referral Start Date –	pt.PaymentTypeID = c.PaymentTypeID
	ascending	inner join Patients pa on pa.PatientID =
	Contract Start Date –	r.PatientID
	ascending	

18. Display the number of	Number of contracts (This is a single value)	inner join Physicians ph on ph.PhysicianID = r.PhysicianID order by PaymentType, ph.LastName, pa.LastName, r.StartDate, c.StartDate select COUNT(PaymentType) as 'Number of Contracts' from Contracts c
contracts whose payment method is Insurance	value)	inner join PaymentTypes pt on pt.PaymentTypeID = c.PaymentTypeID where PaymentType = 'Insurance'
19. Display the number of contracts whose payment method is Insurance, broken out by Insurance Company	Insurance Company Name, number of contracts Sort order: Insurance company name	select InsuranceCompany as 'Insurance Company Name', COUNT(PaymentType) as 'Number of Contracts' from Contracts c inner join PaymentTypes pt on pt.PaymentTypeID = c.PaymentTypeID inner join InsuranceCompanies ic on ic.InsuranceID = c.InsuranceID where PaymentType = 'Insurance' group by InsuranceCompany order by InsuranceCompany
20. List the Employees who are Nurses	Employee First Name, followed by a space, followed by Employee Middle Initial, followed by a space, followed by Employee Last Name (call this whole field "Nurses")	select CONCAT(FirstName, ISNULL(' ' + MiddleInitial + ' ', ' '), LastName) as 'Nurses' from Employees e inner join EmployeeRanks er on er.RankID = e.RankID inner join EmployeeTypes et on et.EmployeeTypeID = er.EmployeeTypeID where EmployeeType = 'Nurse'
21. Display the average hourly wage for all employees who are aides.	Average hourly wage (single value)	select AVG(HourlyWage) as 'Average Hourly Wage' from Employees e inner join EmployeeRanks er on er.RankID = e.RankID inner join EmployeeTypes et on et.EmployeeTypeID = er.EmployeeTypeID where EmployeeType = 'Aide'
22. Display the average hourly wage for all hourly employees broken out by level.	Skill level, average wage Sort order: Skill Level	select SkillLevel as 'Skill Level', AVG(HourlyWage) as 'Average Wage' from Employees e inner join EmployeeRanks er on er.RankID = e.RankID inner join EmployeeSkillLevels esl on esl.SkillLeveIID = er.SkillLeveIID group by SkillLevel order by SkillLevel

23. Display the total salary for all	Total salaries (single value)	select sum(Salary) as TotalSalaries from Employees
salaried employees.		
24. Display the number of employees assigned to each rank.	RankID, Employee Type, Skill Level, Employee Title, number of employees Sort Order: RankID – ascending Employee type – ascending Skill Level – ascending Employee Title – ascending	select er.rankid, et.employeetype, esl.skilllevel, etl.employeetitle, count(*) as numberofemployees from employees e join employeeranks er on e.rankid = er.rankid join employeetypes et on er.employeetypeid = et.employeetypeid join employeeskilllevels esl on er.skilllevelid = esl.skilllevelid join employeetitles etl on er.titleid = etl.employeetitleid group by er.rankid, et.employeetype, esl.skilllevel, etl.employeetitle order by er.rankid asc, et.employeetype asc, esl.skilllevel asc, esl.skilllevel asc, etl.employeetitle asc
25. Display a list of Employees	Employee Last Name, Employee First Name	select e.lastname,
who are nurses and were	Sort order: Last Name – ascending First Name – ascending	e.firstname from
and were available to work	i iist Name – ascending	employees e
on Sunday		join
evenings during		employeeranks er on e.rankid =
the week of		er.rankid
11/2/2014		join
		employeetypes et on
		er.employeetypeid =
		et.employeetypeid

		Ι
		join availability a on e.employeeid =
		a.employeeid
		1 · · · · · ·
		join
		daysofweek d on a.dayofweekid =
		d.dayofweekid
		join
		shifts s on a.shiftid = s.shiftid
		where
		et.employeetype = 'Nurse'
		and d.dayofweek = 'Sunday'
		and s.shiftname = 'Evening'
		and a.weekof = '2014-11-02'
		order by
		e.lastname asc,
		e.firstname asc
26. Display a list	Employee Last Name, Employee First	select
of Employees	Name,	distinct
who were	Employee Type, Employee Title	e.lastname,
available to work	Sort order: Employee Type – ascending	e.firstname,
during morning	Employee Title – ascending	et.employeetype,
shifts during the	Employee Last Name –	etl.employeetitle
week of	ascending	from
11/2/2014 and	Employee First Name –	employees e
had a skill level of	ascending	join
level 3.	ascending	employeeranks er on e.rankid =
level 3.		er.rankid
		join
		employeetypes et on
		er.employeetypeid =
		et.employeetypeid
		join
		employeeskilllevels esl on
		er.skilllevelid = esl.skilllevelid
		join
		employeetitles etl on er.titleid =
		etl.employeetitleid
		join
		availability a on e.employeeid =
		a.employeeid
		join
		daysofweek d on a.dayofweekid =
		d.dayofweekid
		join
		shifts s on a.shiftid = s.shiftid
		where
		esl.skilllevel = 'Level 3'
1		

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
and a.weekof = '2014-11-02'
order by
et.employeetype asc,
etl.employeetitle asc,
e.lastname asc,
e.firstname asc
select
sum(si.quantity) as total_catheters
from
supplyinventory si
join
supplies s on si.supplyid = s.supplyid
where
s.supplydescription = 'Catheters'
and year(si.datereceived) = 2013
select
sum(si.unitcost * si.quantity) as
total_cost
from
supplyinventory si
join
supplies s on si.supplyid = s.supplyid
join
medicalsuppliers ms on si.supplierid
= ms.supplierid
where
s.supplydescription = 'sterile gloves -
small'
and ms.suppliername = 'Poole''s
Medical Supplies'
and year(si.datereceived) = 2013
and year(si.datereceived) = 2013
salact s supplydescription as supply
select s.supplydescription as supply,
ms.suppliername as supplier,
avg(si.unitcost) as
average_cost_per_supply_item
from supplyinventory si
full join supplies s on si.supplyid =
s.supplyid
ι σισαρριγία

30. Display the	Supplier, Total cost of all items provided	full join medicalsuppliers ms on si.supplierid = ms.supplierid group by s.supplydescription, ms.suppliername order by s.supplydescription asc, ms.suppliername asc SELECT ms.SupplierName,
total cost of all	by supplier	SUM(si.UnitCost * si.Quantity) AS TotalCost
items purchased from suppliers	Sort order: Supplier – ascending	FROM MedicalSuppliers ms
broken out by		INNER JOIN SupplyInventory si ON
supplier.		ms.SupplierID = si.SupplierID
		GROUP BY ms.SupplierName
		ORDER BY ms.SupplierName ASC;
31. Display a list	DateRendered, Patient Last Name,	SELECT
of all the visits	Employee Last Name, Start Time, End	v.DateRendered,
that occurred	time	p.LastName AS PatientLastName,
from March 20,	Sort order: DateRendered – ascending	e.LastName AS EmployeeLastName,
2014 to March	Patient Last Name –	v.StartTime,
25, 2014	ascending	v.EndTime
(including March	Employee Last Name –	FROM Visits v
20 and March 25)	ascending	INNER JOIN Patients p ON v.PatientID =
	Start Time – ascending	p.PatientID
		INNER JOIN Employees e ON
		v.EmployeeID = e.EmployeeID WHERE v.DateRendered BETWEEN
		'2014-03-20' AND '2014-03-25'
		ORDER BY
		v.DateRendered ASC,
		p.LastName ASC,
		e.LastName ASC,
		v.StartTime ASC;
32. List the total	Total charges (single value)	
charges for the		SELECT SUM(vd.Charge) AS
visit that		TotalCharges
occurred on		FROM VisitDetails vd
2/12/2014 for		Inner Join Visits v ON vd.VisitID =
Helen Ramirez		v.VisitID
that was		Inner Join Patients p ON v.PatientID =
provided by		p.PatientID
Laura White.		WHERE p.FirstName = 'Helen'
		AND v Data Bandarad = '2014 02 12'
22 Liet the	Total number of nationts (single value)	AND v.DateRendered = '2014-02-12';
33. List the	Total number of patients (single value)	SELECT COUNT(Distinct v.PatientID) AS
number of		'Total Patients'

patients who received insulin injections during 2014 (Note this is the number of unique patients who ever received insulin injections – not the number of visits in which insulin injections were provided).		FROM Visits v Inner Join VisitDetails vd ON v.VisitID = vd.VisitID Inner Join Services s ON vd.ServiceID = s.ServiceID Where s.ServiceName = 'Insulin Injections' AND v.DateRendered BETWEEN '2014-01-01' AND '2014-12-31';
34. List the total number of 4" self-adhesive bandages that were used in 2014	Total number of 4" self-adhesive bandages (single value)	SELECT Count(s.SupplyDescription) AS 'Total Number of 4" self-adhesive Bandages' FROM Supplies s INNER JOIN VisitDetails vd ON s.SupplyID = vd.SupplyID INNER JOIN Services sv ON vd.ServiceID = sv.ServiceID INNER JOIN Visits v ON vd.VisitID = v.VisitID WHERE s.SupplyDescription = '4" self-adhesive bandages' AND v.DateRendered BETWEEN '2014-01-01' AND '2014-12-31';
35. List the average charge per visit per month in 2014 broken out by months	Month, average cost per visit Sort order: month number - ascending	select sc.Month, AVG(sc.SumCharge) AS 'Average Cost Per Visit' from (select Month(v.DateRendered) as Month, SUM(Charge) as SumCharge from Visits v inner join VisitDetails vd on v.VisitID = vd.VisitID where v.DateRendered between '2014- 01-01' AND '2014-12-31' group by v.VisitID, Month(v.DateRendered)) as sc group by sc.Month order by Month ASC;
36. Provide a unique list of patients who received visits for feeding from November 1,	Patient Last Name, Patient First Name Sort order: Patient Last Name – ascending Patient First Name – ascending	select Distinct p.LastName, p.FirstName from Visits v JOIN VisitDetails vd ON v.VisitID = vd.VisitID

2014 until the	JOIN Services s ON vd.ServiceID =
current date.	s.ServiceID
	JOIN Patients p ON v.PatientID =
	p.PatientID
	Where
	s.ServiceName = 'Feeding'
	and
	v.DateRendered >= '2014-11-01'
	Order By
	p.LastName asc,
	p.FirstName asc

Screenshot of each working query:

Q1:



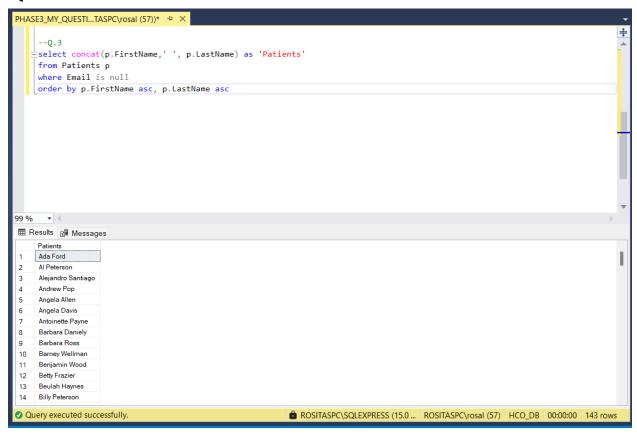
Q2:

```
select concat(p.FirstName,' ',p.LastName) as 'Patients', p.Phone_Alternate
     from Patients p
      where p.Phone_Alternate is not null
    order by p.FirstName asc, p.LastName asc
99 % ▼ ◀
Patients Phone_Alternate
Aaron Lofer (540) 559-6584
    Aaron Morgan (434) 843-6436
Aaron Reed (434) 774-3353
 4 Abednego Nebo (434) 159-2495
                (434) 281-2648
 5 Ada Ford
 6 Adam Taylor
                   (540) 613-8699
                   (434) 821-1394
     Al Duncan
     Al Peterson
                   (434) 733-8682
                   (434) 523-7582
    Alan Adams
 10 Alan Jones
                   (434) 574-8884
                   (434) 995-5498
    Alan Lewis
     Albert Gonzalez (434) 647-1844
     Alberto Reese (434) 794-5224
     Alex Brewer
                   (434) 442-2159

    Query executed successfully.

                                                                   ROSITASPC\SQLEXPRESS (15.0 ... ROSITASPC\rosal (57) | HCO_DB | 00:00:00 | 319 rows
```

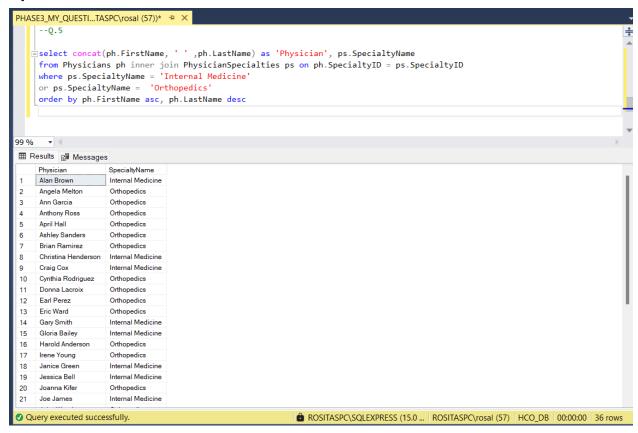
Q3:



Q4:

```
select p.LastName, p.Address_Line1, p.Address_Line2, z.City, z.State, z.ZipCode
      from Patients p inner join ZipCodes z on p.ZipCode = z.ZipCode
      where p.ZipCode = '24551'
     order by p.LastName desc
99 %
LastName
                 Address_Line1
                                          Address_Line2
                                                        City
                                                                    ZipCode
                                                               State
    Wise
                 5779 Hidden Wynd
                                                        Forest VA
                                          NULL
      Wellman
                 8765 New York Ave.
                                          Apt. 32-7
                                                        Forest VA
                                                                     24551
      Washington 8194 Rocky Island Heights
                                                                     24551
                                          NULL
                                                        Forest VA
      Ward
                 2892 Middle Embers Crossing
                                          NULL
                                                        Forest VA
                                                                     24551
                 1862 Umber Deer Passage
                                          NULL
                                                                     24551
     Walker
                                                        Forest VA
     Stokes
                 5671 Old Island Isle
                                          NULL
                                                        Forest VA
                                                                     24551
      Scott
                 9071 Cotton Freeway
                                          NULL
                                                        Forest VA
                                                                     24551
                 9854 Burning Wagon Way
      Santos
                                          NULL
                                                        Forest VA
                                                                     24551
9
      Rodriguez
                 3227 Grand Cider Via
                                          NULL
                                                        Forest VA
                                                                     24551
     Roberts
                 6492 Clear Berry Pike
                                          NULL
                                                        Forest VA
                                                                     24551
      Rivera
                 2137 Stony Panda Expressway
                                          NULL
                                                        Forest VA
                                                                     24551
 11
                 2435 Clear Mews
     Price
                                                        Forest VA
 12
     Pierce
                 8534 Indian Cider Point
                                          NULL
                                                        Forest VA
                                                                     24551
 13
                                                                     24551
 14
     Ortega
                 5348 Sleepy Wagon Jetty
                                          NULL
                                                        Forest VA
 15
     Miller
                 1229 Clear Grove Common
                                          NULL
                                                        Forest VA
                                                                     24551
                 9421 Noble Close
                                                                     24551
 16
     Martin
                                          Apt. 211
                                                        Forest VA
 17
     Marshall
                 4571 Grand Glen
                                          NULL
                                                        Forest VA
                                                                     24551
 18
     Lee
                 9457 Red Cider Private
                                          NULL
                                                        Forest VA
                                                                     24551
 19
      King
                 1189 Grand Glen
                                          NULL
                                                        Forest VA
                                                                     24551
 20
      Hammond
                 1463 Rocky Cape
                                          NULL
                                                        Forest VA
                                                                     24551
     Griffin
                 4822 Emerald Beacon Farm
                                          NULL
                                                        Forest VA
                                                                     24551
Query executed successfully.
                                                                       ROSITASPC\SQLEXPRESS (15.0 ... | ROSITASPC\rosal (57) | HCO_DB | 00:00:00 | 36 rows
```

Q5:



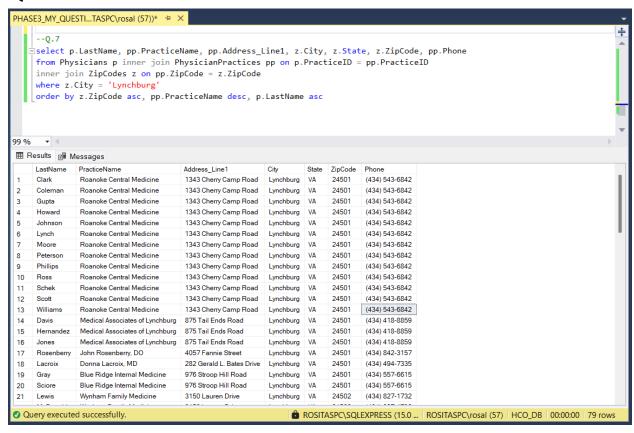
Q6:

```
.
∃select ph.LastName, ps.SpecialtyName, pp.PracticeName
      from Physicians ph inner join PhysicianSpecialties ps on ph.SpecialtyID = ps.SpecialtyID
      inner join PhysicianPractices pp on ph.PracticeID = pp.PracticeID
     order by ps.SpecialtyName asc, ph.LastName asc, pp.PracticeName asc
       - ▼ - 《
99 %
■ Results ■ Messages
                  SpecialtyName
      LastName
                                                     PracticeName
                  Allergy & Immunology
                                                     Piedmont Family Practice
     Andrews
      Bennett
                  Allergy & Immunology
                                                     Piedmont Family Practice
                                                     Light Medical
                  Allergy & Immunology
      Henning
                  Allergy & Immunology
                                                     Light Medical
      Nelson
                  Allergy & Immunology
                                                     Piedmont Family Practice
      Reed
                  Allergy & Immunology
                                                     Light Medical
      Sanchez
                                                     Light Medical
      Thomas
                  Alleray & Immunology
      Thompson
                  Allergy & Immunology
                                                     Light Medical
      Hendricks
                  Cardiothoracic Radiology
                                                     Central VA Cardiology Associates
10
      Taylor
                  Cardiothoracic Radiology
                                                     Central VA Cardiology Associates
11
      Pletke
                  Cardiovascular
                                                     Lynchburg Associates
12
      Pressman
                  Cardiovascular
                                                     Light Medical
13
      Rogers
                  Cardiovascular
                                                     Light Medical
14
      Boman
                  Endocrinology, Diabetes & Metabolism Bedford Associates
15
      Carter
                  Endocrinology, Diabetes & Metabolism Lynchburg Associates
      Collins
16
                  Endocrinology, Diabetes & Metabolism Bedford Associates
17
      Gray
                  Endocrinology, Diabetes & Metabolism Blue Ridge Internal Medicine
18
      Larson
                  Endocrinology, Diabetes & Metabolism Lynchburg Associates
19
      Patterson
                  Endocrinology, Diabetes & Metabolism Bedford Associates
      Rosenberry
                  Endocrinology, Diabetes & Metabolism John Rosenberry, DO
                  Endocrinology, Diabetes & Metabolism
                                                    Blue Ridge Internal Medicine

    Query executed successfully.

                                                                            ROSITASPC\SQLEXPRESS (15.0 ... | ROSITASPC\rosal (57) | HCO_DB | 00:00:00 | 158 rows
```

Q7:



Q8:

```
PHASE3_MY_QUESTI...TASPC\rosal (57))* + X
order by z.ZipLode asc, pp.PracticeName desc, p.LastName asc
                                                                                                                                                              ‡
   select ps.SpecialtyName, count(p.PhysicianID) as 'Number of Physicians'
     from Physicians p inner join PhysicianSpecialties ps on p.SpecialtyID = ps.SpecialtyID
      group by SpecialtyName
    order by SpecialtyName
99 % 🔻 🔻

    ■ Results    ■ Messages
                                      Number of Physicians
      SpecialtyName
    Allergy & Immunology
     Cardiothoracic Radiology
3
     Cardiovascular
    Endocrinology, Diabetes & Metabolism 9
4
    Endovascular Surgical Neuroradiology 5
Family Medicine 10
6
                                     10
                                   12
    Geriatric Medicine
Internal Medicine
8
                                     10
    Internal Medicine 10
Musculoskeletal Oncology 5
                            2
 10 Neurology
 11 Neuromuscular Medicine
 12 Obstetrics
 13 Opthalmology
 14 Orthopedics
                                      26
 15 Otolaryngology
 16 Pain Medicine
 17 Pediatric Cardiology
                                     3
 18 Pediatrics
                                     2
 19 Physical Medicine & Rehabilitation
 20
     Plastic Surgery
 21
     Pulmonary & Critical Care
                                      13
Query executed successfully.
                                                                         ROSITASPC\SQLEXPRESS (15.0 ... ROSITASPC\rosal (57) HCO_DB | 00:00:00 | 26 rows
```

Q9:

```
SQLQuery1.sql - B...PTO\ADM_Ryan (58))* → ×
          elect pr.practiceName 'Practice Name', s.SpecialtyName 'Specialty Name', COUNT(p.PracticeID) as '# of Physicians in Practice' from Physicians p
inner join PhysicianPractices pr on pr.PracticeID = p.PracticeID
inner join PhysicianSpecialties s on s.SpecialtyID = p.SpecialtyID
group by pr.PracticeName, s.SpecialtyName
order by PracticeName ASC, SpecialtyName ASC
 100 % ▼ 4
 Practice Name Specialty Name
1 Arnhurst Medicine Geriatric Medicine
2 Arnhurst Medicine Internal Medicine
3 Arnhurst Medicine Neuromuscular Me
                                                                                                                                # of Physicians in Practice
                                                                 Internal Medicine
Neuromuscular Medicine
           Amhurst Medicine
                                                                  Orthopedics
         Bedford Associates Endocrinology, Diabetes & Metabolism Ellus Ridge Internal Medicine Blus Ridge Osteopathic Medicine Centro Family Practice Centra Orthopedics Oftopodics
          Bedford Associates
                                                                  Endocrinology, Diabetes & Metabolism
           Centra Orthonedics
                                                                 Orthopedics
          Central VA Cardiology Associates
Central VA Physicians
                                                 Opthalmology
17 Central VA Physicians

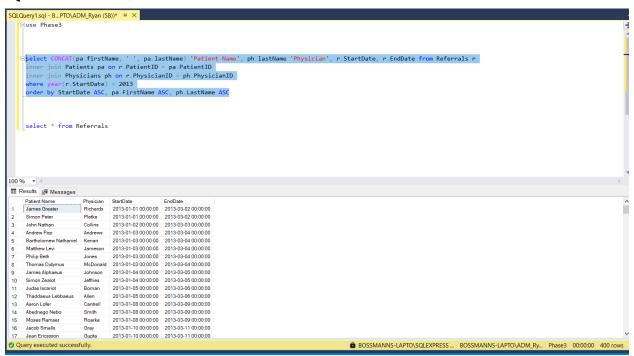
• Query executed successfully.
                                                                 Sports Medicine
                                                                                                                                                                                                                                              BOSSMANNS-LAPTO\SQLEXPRESS ... BOSSMANNS-LAPTO\ADM_Ry... Phase3 00:00:00 | 49 rows
```

Q10:

```
SQCOPY Set = Provided Successfully.

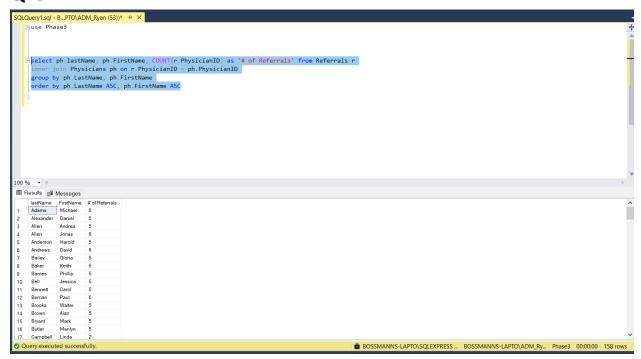
| SQCOPY Set = Provided Successfully | SQUE | Squeeze | Squ
```

Q11:

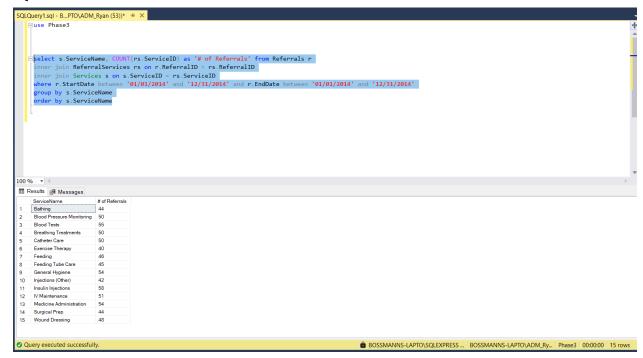


Q12:

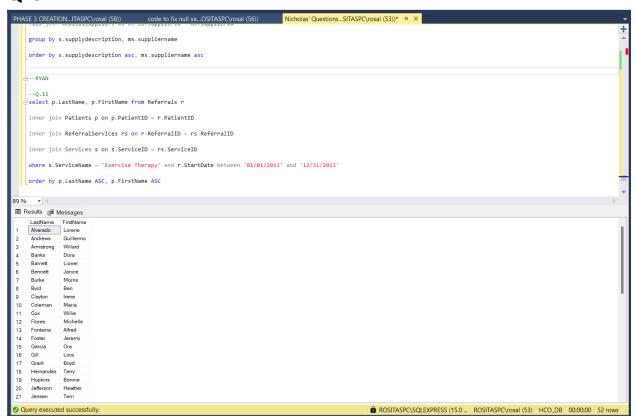
Q13:



Q14:



Q15:



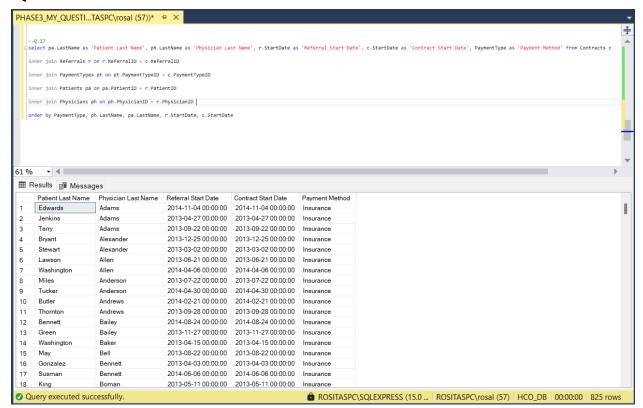
Q16:

```
--0. 16
   inner join Services s on s.ServiceID = rs.ServiceID
inner join Frequencies f on f.FrequencyID = rs.FrequencyID
    where ServiceName = 'Insulin Injections' and Frequency <> '2X Daily'
    order by ph.LastName, pa.LastName, r.StartDate
      ▼ 4 📖
74 %
■ Results ■ Messages
     Patient Last Name Physician Last Name Referral Start Date
                     Allen
                                       2013-06-21 00:00:00
     Lawson
                                       2014-02-05 00:00:00
     Sanders
                     Bryant
2
                                       2014-05-08 00:00:00
3
     Simpson
                     Cook
4
     Lowe
                     Howard
                                       2014-05-30 00:00:00
                                       2013-04-12 00:00:00
     Miller
                     James
     Byrd
                     Jeffries
                                       2014-11-22 00:00:00
     Fernandez
                     King
                                       2013-08-18 00:00:00
     Franklin
                     Perry
                                       2014-10-09 00:00:00
     Gill
                      Sanders
                                       2014-09-14 00:00:00
 10
     Powell
                                       2013-05-14 00:00:00

    Query executed successfully.

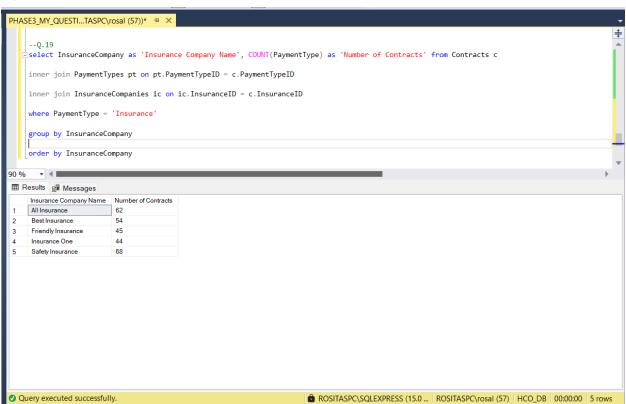
                                                                      ROSITASPC\SQLEXPRESS (15.0 ... ROSITASPC\rosal (57) HCO_DB | 00:00:00 | 10 rows
```

Q17:



Q18:

Q19:



Q20:

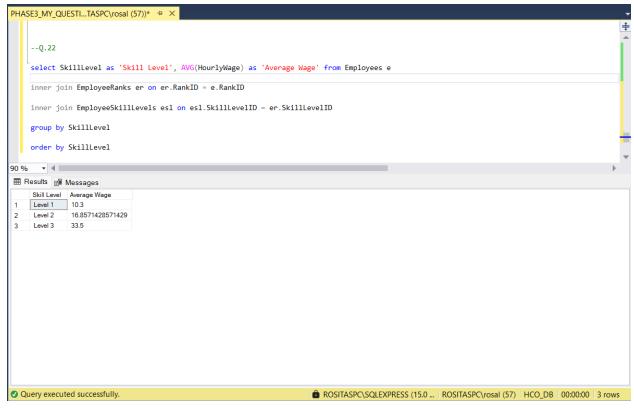
```
PHASE3_MY_QUESTI...TASPC\rosal (57))* 😕 ×
     ____select CONCAT(FirstName, ISNULL(' ' + MiddleInitial + ' ', ' '), LastName) as 'Nurses' from Employees e
     inner join EmployeeRanks er on er.RankID = e.RankID
     inner join EmployeeTypes et on et.EmployeeTypeID = er.EmployeeTypeID
     where EmployeeType = 'Nurse'
 90 % •
 Jimmy T Alexander
      Louis Baker
    Annie S Barnes
Craig G Campbell
Ruby F Clark
Georgina A Cox
 7 Gary U Diaz
8 Barbara N Echols
9 Keith O Evans
  10 Betty T Gonzalez
 11 Mary J Granda
 12 Aaron S Henderson
 13 Todd R Hill
 14 Tammy S Jackson
 15 Jena B Jena
 16 Michelle D Johnson
 17 Richard T Kelly
 18 Jeffrey J Lee

    Query executed successfully.

                                                                                 ROSITASPC\SQLEXPRESS (15.0 ... | ROSITASPC\rosal (57) | HCO_DB | 00:00:00 | 34 rows
```

Q21:

Q22:



Q23:



Q24:

```
SQLQuery2.sql - DE...6EKEQO\justi (52))*   坤   X
    select
         er.rankid,
         et.employeetype,
         esl.skilllevel,
        etl.employeetitle,
          count(*) as numberofemployees
         employees e
     join
        employeeranks er on e.rankid = er.rankid
     join
        employeetypes et on er.employeetypeid = et.employeetypeid
    join
        employeeskilllevels esl on er.skilllevelid = esl.skilllevelid
    join
       employeetitles etl on er.titleid = etl.employeetitleid
     group by
       er.rankid,
         et.employeetype,
        esl.skilllevel,
        etl.employeetitle
     order by
        er.rankid asc,
         et.employeetype asc,
         esl.skilllevel asc,
       etl.employeetitle asc
99 %
rankid employeetype skilllevel employeetitle numberofemployees
                     Level 2 LPN-1
Level 2 LPN-2
    1 Nurse
          Nurse
                            LPN-3
           Nurse
                      Level 3
3
                      Level 3 LPN-4
          Nurse
                      Level 3 LPN-5
6
7
          Nurse
                     Level 3 RN-1
                     Level 3 RN-2
          Nurse
                      Level 3 RN-3
8
          Nurse
           Nurse
                      Level 3
                            RN-4
 10
    10
          Nurse
                      Level 3 RN-5
 11
    11
           Nurse
                     Level 3 RN-6
 12
    12
           Nurse
                     Level 3 RN-7
    13
           Aide
                     Level 1 A-1
 13
                     Level 1 A-2
 14
     14
           Aide
     15
                                                                    â DESKTOP-T6EKEQO\SQLEXPRESS ... | DESKTOP-T6EKEQO\justi ... | HCO_DB | 00:00:00 | 19 rows

    Query executed successfully.
```

Q25:

```
SQLQuery2.sql - DE...6EKEQO\justi (52))* 😕 🗶
    select
          e.lastname,
          e.firstname
      from
          employees e
      join
         employeeranks er on e.rankid = er.rankid
      join
          employeetypes et on er.employeetypeid = et.employeetypeid
      join
         availability a on e.employeeid = a.employeeid
      join
         daysofweek d on a.dayofweekid = d.dayofweekid
      join
         shifts s on a.shiftid = s.shiftid
       et.employeetype = 'Nurse'
         and d.dayofweek = 'Sunday'
and s.shiftname = 'Evening'
and a.weekof = '2014-11-02'
      order by
        e.lastname asc,
       e.firstname asc
99 % 🔻 🔻
 Results Messages
    lastname firstname
Alexander Jimmy
Cox Georgina
     Hill
               Todd
     Johnson Michelle
     Kelly Richard
Morgan Janice
Powell Alice
     Smith
               Randy
     Taylor
               Ashley
 10
    White
              Laura
Query executed successfully.
                                                                            â DESKTOP-T6EKEQO\SQLEXPRESS ... | DESKTOP-T6EKEQO\justi ... | HCO_DB | 00:00:00 | 10 rows
```

Q26:

```
select
distinct
        e.lastname,
         e.firstname,
        et.employeetype,
        etl.employeetitle
        employees e
        employeeranks er on e.rankid = er.rankid
       employeetypes et on er.employeetypeid = et.employeetypeid
     join
       employeeskilllevels esl on er.skilllevelid = esl.skilllevelid
       employeetitles etl on er.titleid = etl.employeetitleid
     join
        availability a on e.employeeid = a.employeeid
       daysofweek d on a.dayofweekid = d.dayofweekid
     join
       shifts s on a.shiftid = s.shiftid
       esl.skilllevel = 'Level 3'
        and s.shiftname = 'Morning'
         and a.weekof = '2014-11-02'
99 %
     - ▼ ∢
lastname firstname
Lee Jeffrey
                     Nurse
                                LPN-3
           Jerry
                                LPN-3
     Wilson
                      Nurse
    Smith
              Randy
                     Nurse
    White
                                LPN-4
             Laura
     Alexander Jimmy
                     Nurse
                                LPN-5
    Evans
             Keith
                     Nurse
                                LPN-5
             Carlos Nurse
                                RN-1
    Lopez
    Thompson Wilma
                     Nurse
             Georgina Nurse
   Kelly
             Richard Nurse
                                RN-2
    Jackson Tammy
Rogers Maria
                      Nurse
                                RN-3
12
   Rogers
                     Nurse
                                RN-3
                                                                   â DESKTOP-T6EKEQO\SQLEXPRESS ... | DESKTOP-T6EKEQO\justi ... | HCO_DB | 00:00:00 | 26 rows
Query executed successfully.
```

Q27:

Q28:

```
Select

sum(si.unitcost * si.quantity) as total_cost

from

supplyinventory si

join

medicalsuppliers ms on si.supplyid = ms.supplierid

where

s.supplydescription = 'sterile gloves - small'

and ms.suppliername = 'Poole''s Medical Supplies'

and year(si.datereceived) = 2013

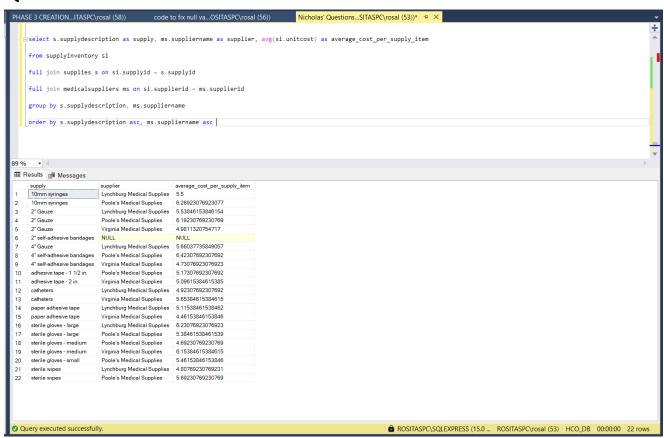
99 %

Results @ Messages

| bold_cost |
| 1 | 1662 |

| O Query executed successfully.
```

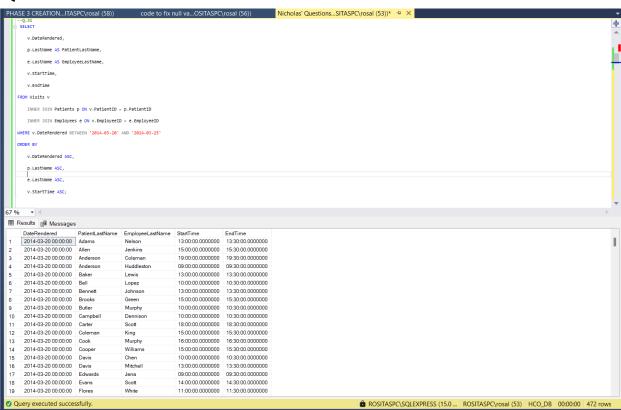
Q29:



Q30:

```
⊑SELECT ms.SupplierName, SUM(si.UnitCost * si.Quantity) AS TotalCost
     FROM MedicalSuppliers ms
     INNER JOIN SupplyInventory si ON ms.SupplierID = si.SupplierID
     GROUP BY ms.SupplierName
     ORDER BY ms.SupplierName ASC;
99 % 🔻 🔻
SupplierName
                          TotalCost
    Lynchburg Medical Supplies 11961
     Poole's Medical Supplies
                          15712
    Virginia Medical Supplies
                          11506
Query executed successfully.
                                                                       ROSITASPC\SQLEXPRESS (15.0 ... | ROSITASPC\rosal (57) | HCO_DB | 00:00:00 | 3 rows
```

Q31:



Q32:

```
--Q.32
SELECT SUN(vd.Charge) AS TotalCharges
FROM VisitDetails vd
Inner Join Patient p ON v.PatientID = p.PatientID
Inner Join Patient p ON v.PatientID = p.PatientID
WHERE p.FirstName = 'Helen'
AND p.LastName = 'Helen'
AND p.LastName = '12014-02-12';

Teachunge
1 99 %
Teachunge
1 90 %
Teachung
1 90 %
Teachunge
```

Q33:

```
--Q.33

a SELECT COUNT(Distinct v.PatientID) AS 'Total Patients'

FROM Visits v

Inner Join Visitbetails vd ON v.VisitID = vd.VisitID

Inner Join Services s ON vd.ServiceID = s.ServiceID

Where s.ServiceName = 'Insulin Injections'

AND v.DateNendered BETWEEN '2014-01-01' AND '2014-12-31';

BROSHING Messages

Total Patients

1 80

ROSHINGSPC/SOLEXPRESS (15.0 _ ROSHASPC/votal (53) HCQ_DB 0000000 1 rows)
```

Q34:

```
--Question 34
--SELECT Count(s.SupplyDescription) AS 'Total Number of 4" self-adhesive Bandages'
FROM Supplies s
INNER JOIN VisitDetails vd ON s.SupplyID = vd.SupplyID
INNER JOIN Services sv ON vd.ServiceID = sv.ServiceID
INNER JOIN Visits v ON vd.VisitID = v.VisitID
WHERE s.SupplyDescription = '4" self-adhesive bandages'
AND v.DateRendered BETWEEN '2014-01-01' AND '2014-12-31';

Results Messages

Total Number of 4' self-adhesive Bandages
1 2453
```

Q35:

```
--List the average charge per visit per month in 2014 broken out by months
     --Month, average cost per visit
    --Sort order: month number - ascending
   ⊟select sc.Month, AVG(sc.SumCharge) AS 'Average Cost Per Visit'
    (select Month(v.DateRendered) as Month, SUM(Charge) as SumCharge from Visits v
    inner join VisitDetails vd on v.VisitID = vd.VisitID
    where v.DateRendered between '2014-01-01' AND '2014-12-31'
     group by v.VisitID, Month(v.DateRendered)) as sc
     group by sc.Month
    order by Month ASC;
100 % ▼ ◀ ■
Month Average Cost Per Visit
    1 137.063394683027
2
          138.177707006369
3
          137.8382175833
    4
          137.165295437547
5
    5
          140.358419243986
6
    6
          141.119789842382
7
          140.487752928647
8
    8
          140.156925540432
9
          138.755357864941
10
    10
          141.600649350649
11
    11
          138 896123447497
    12
          141 174956114687
12
```

Q36:

