

## HEALTH CARE OPTIONS (HCO) PROJECT QUERIES

Write and execute queries to perform the following functions:

Criteria	Output Format	<b>Your Answer: Type your query in this column. The first one has been done for you. Screenshots should be pasted below this table. (Make sure the number of rows that are returned appears in the screenshot.)</b>
1. Display a list of all patients who have a last name beginning with the letter "P".	<p>Patient Last Name, followed by a comma and a space, followed by the patient's first name. (e.g. Smith, John)</p> <p>Sort order: Patient Last Name - ascending</p>	<pre>select Lastname + ', ' + FirstName as PatientName from Patients where lastname like 'P%' order by lastname</pre>
2. Display a list of all patients who have an alternate/cell phone number	<p>Patient First Name, followed by a space, followed by the patient's last name. (e.g. Melesa Poole), alternate/cell phone number</p> <p>Sort order: Patient First Name – ascending</p> <p style="text-align: center;">Patient</p> <p>Last Name – ascending</p>	<pre>SELECT FirstName + ' ' + LastName AS PatientName, AlternatePhone FROM Patients WHERE AlternatePhone IS NOT NULL ORDER BY FirstName ASC, LastName ASC;</pre>
3. Display a list of all patients who do <u>not</u> have	<p>Patient First Name, followed by a space, followed by the</p>	<pre>SELECT FirstName + ' ' + LastName AS PatientName FROM Patients WHERE Email IS NULL</pre>

<p>an email address.</p>	<p>patient's last name. (e.g. Melesa Poole)</p> <p>Sort order: Patient First Name – ascending</p> <p style="text-align: center;">Patient</p> <p>Last Name – ascending</p>	<p>ORDER BY FirstName ASC, LastName ASC;</p>
<p>4. Display a list of all patients who live in zipcode 24551.</p>	<p>Patient Last Name, Address1, Address2, City, State, Zip</p> <p>Sort order: Patient Last Name – descending</p>	<p>SELECT LastName, Address1, Address2, City, State, Zip FROM Patients WHERE Zip = '24551'</p> <p>ORDER BY LastName DESC;</p>
<p>5. Display a list of all physicians whose specialty is Internal Medicine or Orthopedics</p>	<p>Physician First Name, space, last name (call this column Physician), Specialty</p> <p>Sort order: Physician First Name – ascending</p> <p style="text-align: center;">Physician</p> <p>Last Name – descending</p>	<p>SELECT FirstName + ' ' + LastName AS Physician, Specialty FROM Physicians WHERE Specialty IN ('Internal Medicine', 'Orthopedics')</p> <p>ORDER BY FirstName ASC, LastName DESC;</p>
<p>6. Display a list of all physicians, their specialties, and their practices</p>	<p>Physician Last Name, Specialty, Practice</p> <p>Sort order: Physician Specialty – ascending</p> <p style="text-align: center;">Physician</p> <p>Last Name – ascending</p>	<p>SELECT LastName AS PhysicianLastName, Specialty, Practice FROM Physicians</p> <p>ORDER BY Specialty ASC, LastName ASC, Practice ASC;</p>

	Practice – ascending	
7. Display a list of all physicians whose practices are in Lynchburg	Physician Last Name, Practice Name, Address, City, State, Zipcode, Phone Sort order: Zipcode – ascending Practice Name – descending Physician Last Name – ascending	SELECT LastName AS PhysicianLastName, Specialty, Practice FROM Physicians ORDER BY Specialty ASC, LastName ASC, Practice ASC;
8. Display the number of physicians in each specialty	Specialty, number of physicians in each specialty Sort order: Specialty	SELECT Specialty, COUNT(*) AS NumberOfPhysicians FROM Physicians GROUP BY Specialty ORDER BY Specialty;
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 Practice, Specialty, COUNT(*) AS NumberOfPhysicians FROM Physicians GROUP BY Practice, Specialty ORDER BY Practice ASC, Specialty ASC;
10. Display the list of specialties that have no physicians assigned to them.	Specialty Sort order: Specialty – ascending	SELECT Specialty FROM Specialties WHERE Specialty NOT IN (SELECT Specialty FROM Physicians) ORDER BY Specialty ASC;
11. Display a list of all referrals whose start	Patient first name, followed by a space, followed by patient last name (Call this whole field “Patient	SELECT FirstName + ' ' + LastName AS PatientName, ReferringPhysicianLastName AS Physician, StartDate, EndDate

<p>date was in 2013.</p>	<p>Name”), Referring Physician Last Name (call this field “Physician”), StartDate, EndDate Sort Order: StartDate – ascending Patient First Name – ascending Physician Last Name - ascending</p>	<p>FROM Referrals WHERE YEAR(StartDate) = 2013 ORDER BY StartDate ASC, FirstName ASC, ReferringPhysicianLastName ASC;</p>
<p>12. Display a list of all the referrals whose start date is between October 1, 2014 and November 5, 2014</p>	<p>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</p>	<p>SELECT FirstName + ' ' + LastName AS PatientName, ReferringPhysicianLastName AS Physician, StartDate, EndDate  FROM Referrals  WHERE StartDate BETWEEN '2014-10-01' AND '2014-11-05'  ORDER BY StartDate ASC, FirstName ASC, ReferringPhysicianLastName ASC;</p>
<p>13. Display the number of referrals given by each physician</p>	<p>Physician Last name, Physician First Name, number of referrals Sort Order: Physician Last Name – ascending Physician First Name – ascending</p>	<p>SELECT ReferringPhysicianLastName, ReferringPhysicianFirstName, COUNT(*) AS NumberOfReferrals  FROM Referrals  GROUP BY ReferringPhysicianLastName, ReferringPhysicianFirstName</p>

		ORDER BY ReferringPhysicianLastName ASC, ReferringPhysicianFirstName ASC;
14. List the number of referrals in 2014 for each service requested.	Service name, number of referrals Sort order: Service name	SELECT ServiceName, COUNT(*) AS NumberOfReferrals FROM Referrals WHERE YEAR(StartDate) = 2014 GROUP BY ServiceName ORDER BY ServiceName;
15. Display a list of all patients requiring exercise therapy in 2013	Patient Last Name, Patient First Name Sort order: Patient last name – ascending Patient first name – ascending	SELECT PatientLastName, PatientFirstName FROM Referrals WHERE ServiceName = 'Exercise Therapy' AND YEAR(StartDate) = 2013 ORDER BY PatientLastName ASC, PatientFirstName ASC;
16. Display a list of any referrals that require “Insulin injections” and “2x Daily” is NOT listed as their frequency.	Patient Last Name, Physician Last Name, referral start date Sort order: Physician Last Name – ascending Patient Last Name – ascending Referral Start Date – ascending	SELECT PatientLastName, ReferringPhysicianLastName, StartDate FROM Referrals WHERE ServiceName = 'Insulin injections' AND Frequency <> '2x Daily' ORDER BY ReferringPhysicianLastName ASC, PatientLastName ASC, StartDate ASC;
17. Display the contracts and payment methods associated with each referral	Patient Last Name, Physician Last Name, Referral Start Date, Contract Start Date, Payment Method Sort Order: Payment Method - ascending Physician Last Name – ascending	SELECT PatientLastName, PhysicianLastName, ReferralStartDate, ContractStartDate, PaymentMethod FROM Referrals ORDER BY PaymentMethod ASC, PhysicianLastName ASC, PatientLastName ASC, ReferralStartDate ASC, ContractStartDate ASC;

	<p>Patient Last Name – ascending</p> <p>Referral Start Date – ascending</p> <p>Contract Start Date – ascending</p>	
18. Display the number of contracts whose payment method is Insurance	Number of contracts (This is a single value)	<pre>SELECT COUNT(*) AS NumberOfContracts FROM Contracts WHERE PaymentMethod = 'Insurance';</pre>
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	<pre>SELECT InsuranceCompanyName, COUNT(*) AS NumberOfContracts FROM Contracts WHERE PaymentMethod = 'Insurance' GROUP BY InsuranceCompanyName ORDER BY InsuranceCompanyName;</pre>
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”)	<pre>SELECT FirstName + ' ' + MiddleInitial + ' ' + LastName AS Nurses FROM Employees WHERE Position = 'Nurse';</pre>
21. Display the average hourly wage for all employees who are aides.	Average hourly wage (single value)	<pre>SELECT AVG(HourlyWage) AS AverageHourlyWage FROM Employees WHERE Position = 'Aide';</pre>
22. Display the average hourly wage	Skill level, average wage Sort order: Skill Level	<pre>SELECT SkillLevel, AVG(HourlyWage) AS AverageWage FROM Employees</pre>

<p>for all hourly employees broken out by level.</p>		<p>WHERE EmploymentType = 'Hourly' GROUP BY SkillLevel ORDER BY SkillLevel;</p>
<p>23. Display the total salary for all salaried employees.</p>	<p>Total salaries (single value)</p>	<p>SELECT SUM(Salary) AS TotalSalaries FROM Employees WHERE EmploymentType = 'Salaried';</p>
<p>24. Display the number of employees assigned to each rank.</p>	<p>RankID, Employee Type, Skill Level, Employee Title, number of employees Sort Order: RankID – ascending Employee type – ascending Skill Level – ascending Employee Title – ascending</p>	<p>SELECT RankID, EmployeeType, SkillLevel, EmployeeTitle, COUNT(*) AS NumberOfEmployees FROM Employees GROUP BY RankID, EmployeeType, SkillLevel, EmployeeTitle ORDER BY RankID ASC, EmployeeType ASC, SkillLevel ASC, EmployeeTitle ASC;</p>
<p>25. Display a list of Employees who are nurses and were available to work on Sunday evenings during the week of 11/2/2014</p>	<p>Employee Last Name, Employee First Name Sort order: Last Name – ascending First Name – ascending</p>	<p>SELECT LastName AS EmployeeLastName, FirstName AS EmployeeFirstName FROM Employees WHERE Position = 'Nurse' AND Availability = 'Sunday Evening' AND WeekOf = '2014-11-02' ORDER BY LastName ASC, FirstName ASC;</p>
<p>26. Display a list of Employees who were available to work during morning shifts during the week of</p>	<p>Employee Last Name, Employee First Name, Employee Type, Employee Title Sort order: Employee Type – ascending Employee Title – ascending</p>	<p>SELECT LastName AS EmployeeLastName, FirstName AS EmployeeFirstName, EmployeeType, EmployeeTitle FROM Employees WHERE Availability = 'Morning' AND WeekOf = '2014-11-02' AND SkillLevel = 3 ORDER BY EmployeeType ASC, EmployeeTitle ASC, LastName ASC, FirstName ASC;</p>

<p>11/2/2014 and had a skill level of level 3.</p>	<p>Employee Last Name – ascending Employee First Name – ascending</p>	
<p>27. Display the total quantity of catheters added to inventory during 2013.</p>	<p>Total catheters (single value)</p>	<p>SELECT SUM(Quantity) AS TotalCatheters FROM Inventory WHERE Item = 'Catheter' AND YEAR(DateAdded) = 2013;</p>
<p>28. Display the total cost of “sterile gloves – small” provided by Poole’s Medical supplies during 2013.</p>	<p>Total cost (single value)</p>	<p>SELECT SUM(Cost) AS TotalCost FROM Supplies WHERE Item = 'Sterile Gloves – Small' AND Supplier = 'Poole’s Medical Supplies' AND YEAR(DatePurchased) = 2013;</p>
<p>29. Display the average cost of supplies for each supply item broken out by supplier.</p>	<p>Supply, Supplier, Average cost per supply item Sort order: Supply – ascending Supplier – ascending</p>	<p>SELECT Supply, Supplier, AVG(Cost) AS AverageCostPerSupplyItem FROM Supplies GROUP BY Supply, Supplier ORDER BY Supply ASC, Supplier ASC;</p>
<p>30. Display the total cost of all items purchased from suppliers broken out by supplier.</p>	<p>Supplier, Total cost of all items provided by supplier Sort order: Supplier – ascending</p>	<p>SELECT Supplier, SUM(Cost) AS TotalCostOfAllItemsProvidedBySupplier FROM Supplies GROUP BY Supplier ORDER BY Supplier ASC;</p>
<p>31. Display a list of all the visits that occurred from</p>	<p>DateRendered, Patient Last Name, Employee Last Name, Start Time, End time</p>	<p>v SELECT DateRendered, PatientLastName, EmployeeLastName, StartTime, EndTime FROM Visits</p>

<p>March 20, 2014 to March 25, 2014 (including March 20 and March 25)</p>	<p>Sort order: DateRendered – ascending Patient Last Name – ascending Employee Last Name – ascending Start Time – ascending</p>	<p>WHERE DateRendered BETWEEN '2014-03-20' AND '2014-03-25' ORDER BY DateRendered ASC, PatientLastName ASC, EmployeeLastName ASC, StartTime ASC;</p>
<p>32. List the total charges for the visit that occurred on 2/12/2014 for Helen Ramirez that was provided by Laura White.</p>	<p>Total charges (single value)</p>	<p>SELECT SUM(Charge) AS TotalCharges FROM Visits WHERE DateRendered = '2014-02-12' AND PatientLastName = 'Ramirez' AND PatientFirstName = 'Helen' AND EmployeeLastName = 'White' AND EmployeeFirstName = 'Laura';</p>
<p>33. List the number of 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</p>	<p>Total number of patients (single value)</p>	<p>SELECT COUNT(DISTINCT PatientID) AS TotalNumberOfPatients FROM Visits WHERE Service = 'Insulin Injections' AND YEAR(DateRendered) = 2014;</p>

<p>were provided).</p>		
<p>34. List the total number of 4" self-adhesive bandages that were used in 2014</p>	<p>Total number of 4" self-adhesive bandages (single value)</p>	<pre>SELECT SUM(Quantity) AS TotalNumberOf4InchSelfAdhesiveBandages FROM Supplies WHERE Item = '4" Self-Adhesive Bandage' AND YEAR(DateUsed) = 2014;</pre>
<p>35. List the average charge per visit per month in 2013 broken out by months</p>	<p>Month, average cost per visit Sort order: month number - ascending</p>	<pre>SELECT MONTH(DateRendered) AS Month, AVG(Charge) AS AverageCostPerVisit FROM Visits WHERE YEAR(DateRendered) = 2013 GROUP BY MONTH(DateRendered) ORDER BY MONTH(DateRendered) ASC;</pre>
<p>36. Provide a unique list of patients who received visits for feeding from November 1, 2014 until the current date.</p>	<p>Patient Last Name, Patient First Name Sort order: Patient Last Name – ascending Patient First Name – ascending</p>	<pre>SELECT DISTINCT PatientLastName, PatientFirstName FROM Visits WHERE Service = 'Feeding' AND DateRendered BETWEEN '2014-11-01' AND CURDATE() ORDER BY PatientLastName ASC, PatientFirstName ASC;</pre>