Supplier parts Database (questions in blue):

1. Get the suppliers with a status of 4 or more:  
   SELECT sno,sname FROM s WHERE status > 4;
2. Get the suppliers who are not in London and have a status > 10:  
   SELECT sno, sname FROM s WHERE (city != "London") AND (status > 10);
3. Get the quantity of green parts from Paris:  
   SELECT sum(qty) FROM sp WHERE pno IN (SELECT pno FROM p WHERE (color = "Green") AND (city = "Paris"));
4. Get the minimum qty of a part for S3:  
   SELECT min(qty) FROM sp WHERE sno = "S3";
5. Get the names of the parts for S1:  
   SELECT pname FROM p WHERE pno IN (SELECT pno FROM sp WHERE sno = "S1");

Northwind Database:

1. Show the name and birthdate of every employee in the British Isles:  
   SELECT FirstName, LastName, BirthDate FROM Employee WHERE Region = "British Isles";
2. Get the firstname of the employee with the last name “Peacock”:  
   SELECT FirstName FROM Employee WHERE LastName = "Peacock";
3. Get the job title and notes about Laura Callahan:  
   SELECT Title, Notes FROM Employee WHERE (FirstName = "Laura") AND (LastName = "Callahan");
4. Show the count of employees with the title of “Dr.”:  
   SELECT count(Id) FROM Employee WHERE TitleOfCourtesy = "Dr.";
5. Show the Sales Managers Title, First Name, and last name:  
   SELECT Title, FirstName, LastName FROM Employee WHERE Title = "Sales Manager";
6. Show the largest freight for an order handled by Andrew Fuller:  
   SELECT max(Freight) FROM "Order" WHERE EmployeeId IN(SELECT Id FROM Employee WHERE (FirstName = "Andrew") and (LastName = "Fuller"));
7. Show the products which contain “Chef” in the title and have at least 50 units in stock. Hint: use the ‘like’ operator (ie. where city like ‘%London%’, the % means anything comes before or after):   
   SELECT ProductName FROM Product WHERE UnitsInStock > 50 AND ProductName LIKE "%Chef%";
8. Show the names of everyone who are NOT sales representatives:  
   SELECT FirstName, LastName FROM Employee WHERE Title = "Sales Representative";
9. Display the names of everyone who reports to Andrew Fuller. (Hint: this is a recursive relationship… will talk more about it in a future class):  
   SELECT FirstName, LastName FROM Employee WHERE ReportsTo IN (SELECT Id FROM Employee WHERE (FirstName = "Andrew") AND (LastName = "Fuller"));  
   **Alternate Method:**

SELECT e.FirstName, e.LastName, d.Id as BossId, d.FirstName as BossFName, d.LastName as BossLName FROM Employee e, Employee d WHERE e.ReportsTo = d.Id and d.FirstName = "Andrew" and d.LastName = "Fuller";

1. Show the number of customers of Robert King:  
   SELECT \* FROM Supplier WHERE ContactName = "Robert King";

(For Q10 I assumed that the since we are looking for customers of Robert King, we look through the contact name in the supplier)

AdventureWorks Data Warehouse:

1. Compute the total cost of sick leave hours for employees that make less than $15 an hour:  
   SELECT sum(SickLeaveHours \* BaseRate) FROM DimEmployee WHERE BaseRate < 15;
2. Show the top 3 highest paid employees based on their base rate:

SELECT FirstName, LastName FROM DimEmployee ORDER BY BaseRate LIMIT 3;

1. Compute the average vacation amount paid to Female employees:  
   SELECT avg(BaseRate \* VacationHours) FROM DimEmployee WHERE Gender = "F";
2. Determine the number of former employees at AdventureWorks:  
   SELECT count(EndDate) FROM DimEmployee;
3. Show the average amount of tax on internet sales:  
   SELECT avg(TaxAmt) FROM FactInternetSales;
4. Determine the number of Vice Presidents:  
   SELECT FirstName, LastName, Title FROM DimEmployee WHERE Title LIKE "%Vice President%";

Chinook Database:

1. Get the total sales by Country:  
   **Uncomment and run each line below one by one in the given order.**

--CREATE TABLE TotalSales (Country TEXT UNIQUE,Sales INTEGER);

--INSERT INTO TotalSales VALUES ("Brazil", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Brazil"));

--INSERT INTO TotalSales Values ("Norway", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Norway"));

--INSERT INTO TotalSales VALUES ("Belgium", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Belgium"));

--INSERT INTO TotalSales VALUES ("Canada", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Canada"));

--INSERT INTO TotalSales VALUES ("Czech Republic", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Czech Republic"));

--INSERT INTO TotalSales VALUES ("Austria", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Austria"));

--INSERT INTO TotalSales VALUES ("Denmark", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Denmark"));

--INSERT INTO TotalSales VALUES ("USA", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "USA"));

--INSERT INTO TotalSales VALUES ("Portugal", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Portugal"));

--INSERT INTO TotalSales VALUES ("France", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "France"));

--INSERT INTO TotalSales VALUES ("Hungary", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Hungary"));

--INSERT INTO TotalSales VALUES ("Ireland", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Ireland"));

--INSERT INTO TotalSales VALUES ("Italy", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Italy"));

--INSERT INTO TotalSales VALUES ("Netherlands", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Netherlands"));

--INSERT INTO TotalSales VALUES ("Poland", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Poland"));

--INSERT INTO TotalSales VALUES ("Spain", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Spain"));

--INSERT INTO TotalSales VALUES ("Sweden", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Sweden"));

--INSERT INTO TotalSales VALUES ("United Kingdom", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "United Kingdom"));

--INSERT INTO TotalSales VALUES ("Australia", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Australia"));

--INSERT INTO TotalSales VALUES ("Argentina", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Argentina"));

--INSERT INTO TotalSales VALUES ("Chile", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "Chile"));

--INSERT INTO TotalSales VALUES ("India", (SELECT sum("TOTAL") FROM Invoice WHERE BillingCountry = "India"));

--SELECT \* FROM TotalSales ORDER BY Sales DESC;

1. Get the Byte Count in Megabytes of all tracks. You can divide by 1000:  
   SELECT sum(Bytes/1000) AS Megabytes FROM Track;
2. Get the length, in seconds, of AC/DC tracks:  
   SELECT Name, (Milliseconds/1000) AS "Length(Seconds)" FROM Track WHERE AlbumId IN

(SELECT AlbumId FROM Album WHERE ArtistId IN (SELECT ArtistId FROM Artist WHERE Name = "AC/DC"));

1. Get the total dollar amount of sales from British Columbia, Canada:  
   SELECT sum("Total") AS "Total Sales Revenue in Canada, BC" FROM Invoice WHERE (BillingState = "BC") AND (BillingCountry = "Canada");