Introductory Problems

**1. Which shippers do we have?**

**We have a table called Shippers. Return all the fields from all the**

**Shippers?**

1. Query –(SELECT \* FROM northwind\_db.shippers;)

|  |  |  |
| --- | --- | --- |
| 1 | Speedy Express | (503) 555-9831 |
| 2 | United Package | (503) 555-3199 |
| 3 | Federal Shipping | (503) 555-9931 |
| 4 | Alliance Shippers | 1-800-222-0451 |
| 5 | UPS | 1-800-782-7892 |
| 6 | DHL | 1-800-225-5345 |
|  |  |  |

**2. Certain fields from Categories**

**In the Categories table, selecting all the fields using this SQL:**

**Select \* from Categories**

**…will return 4 columns. We only want to see two columns,**

**CategoryName and Description?**

1. Query (SELECT category\_name,description FROM northwind\_db.categories;)

CategoryName Description

|  |  |
| --- | --- |
| Seafood | Seaweed and fish |
| Produce | Dried fruit and bean curd |
| Meat/Poultry | Prepared meats |
| Grains/Cereals | Breads, crackers, pasta, and cereal |
| Dairy Products | Cheeses |
| Confections | Desserts, candies, and sweet breads |
| Condiments | Sweet and savory sauces, relishes, spreads, and seasonings |
| Beverages | Soft drinks, coffees, teas, beers, and ales. |

**3.We’d like to see just the FirstName, LastName, and HireDate of all the**

**employees with the Title of Sales Representative. Write a SQL**

**statement that returns only those employees?**

1. Query (SELECT first\_name,last\_name,hire\_date FROM northwind\_db.employees

Where title = 'Sales Representative'; )

FirstName LastName HireDate

|  |  |  |
| --- | --- | --- |
| Nancy | Davolio | 1992-05-01 |
| Janet | Leverling | 1992-04-01 |
| Margaret | Peacock | 1993-05-03 |
| Michael | Suyama | 1993-10-17 |
| Robert | King | 1994-01-02 |
| Anne | Dodsworth | 1994-11-15 |

**4.Now we’d like to see the same columns as above, but only for those**

**employees that both have the title of Sales Representative, and also are**

**in the United States?**

1. Query (SELECT first\_name,last\_name,Hire\_date FROM northwind\_db.employees

Where title='Sales Representative' and country='USA';)

FirstName LastName HireDate

|  |  |  |
| --- | --- | --- |
| Nancy | Davolio | 1992-05-01 |
| Janet | Leverling | 1992-04-01 |
| Margaret | Peacock | 1993-05-03 |

**5.Show all the orders placed by a specific employee. The EmployeeID for**

**this Employee (Steven Buchanan) is 5?**

A. Query (SELECT order\_id,order\_date FROM northwind\_db.orders

Where employee\_id = 5; )

42 rows retrieved

**6.In the Suppliers table, show the SupplierID, ContactName, and**

**ContactTitle for those Suppliers whose ContactTitle is not Marketing**

**Manager?**

**A.** (SELECT supplier\_id, Contact\_Name,

Contact\_Title

FROM northwind\_db.suppliers

where contact\_title <> 'Marketing Manager'; )

**7.In the products table, we’d like to see the ProductID and ProductName**

**for those products where the ProductName includes the string “queso”?**

**A.**  Query (SELECT product\_id,product\_name FROM northwind\_db.products

Where product\_name like '%queso%'; )

**8.Looking at the Orders table, there’s a field called ShipCountry. Write a**

**query that shows the OrderID, CustomerID, and ShipCountry for the**

**orders where the ShipCountry is either France or Belgium?**

**A.** Query(SELECT order\_id,customer\_id,ship\_country FROM northwind\_db.orders

WHERE ship\_country = 'France' or ship\_country='Belgium'; )

**9.Now, instead of just wanting to return all the orders from France of**

**Belgium, we want to show all the orders from any Latin American**

**country. But we don’t have a list of Latin American countries in a table**

**in the Northwind database. So, we’re going to just use this list of Latin**

**American countries that happen to be in the Orders table:**

**Brazil**

**Mexico**

**Argentina**

**Venezuela**

**It doesn’t make sense to use multiple Or statements anymore, it would**

**get too convoluted. Use the In statement?**

**A.** Query(**SELECT order\_id,customer\_id,ship\_country FROM northwind\_db.orders**

**WHERE ship\_country in ('Brazil','Mexico','Argentina','Venezuela');**

**10.For all the employees in the Employees table, show the FirstName,**

**LastName, Title, and BirthDate. Order the results by BirthDate, so we**

**have the oldest employees first?**

**A.** Query **(SELECT first\_name,last\_name,title,birth\_date FROM northwind\_db.employees**

**Order by birth\_date asc);**

**11.In the output of the query above, showing the Employees in order of**

**BirthDate, we see the time of the BirthDate field, which we don’t want.**

**Show only the date portion of the BirthDate field?**

1. Query (SELECT first\_name,last\_name,title,date\_format(birth\_date,'%m-%d-%y') as Birthdate FROM northwind\_db.employees

Order by birth\_date asc;)

**12.Show the FirstName and LastName columns from the Employees table,**

**and then create a new column called FullName, showing FirstName and**

**LastName joined together in one column, with a space in-between?**

1. Query (SELECT first\_name,last\_name,concat(first\_name," ",last\_name)as Full\_name FROM northwind\_db.employees;)

**13.In the OrderDetails table, we have the fields UnitPrice and Quantity.**

**Create a new field, TotalPrice, that multiplies these two together. We’ll**

**ignore the Discount field for now.**

**In addition, show the OrderID, ProductID, UnitPrice, and Quantity.**

**Order by OrderID and ProductID?**

1. Query(SELECT

Order\_id,Product\_ID, round(Unit\_price,2) as Unit\_Price,Quantity,(round(Unit\_price,2)\*Quantity) as Total\_price

FROM

northwind\_db.order\_details

Order by order\_id,product\_id;

**14.How many customers do we have in the Customers table? Show one**

**value only, and don’t rely on getting the recordcount at the end of a**

**resultset?**

1. Query( SELECT Count(customer\_id) FROM northwind\_db.customers; )

**15.Show the date of the first order ever made in the Orders table?**

**A.** Query (SELECT Order\_date FROM northwind\_db.orders

Order by order\_date

Limit 1;)

**16.Show a list of countries where the Northwind company has customers?**

**A.** Query (SELECT Distinct(Country) FROM northwind\_db.customers;)

**17.Show a list of all the different values in the Customers table for**

**ContactTitles. Also include a count for each ContactTitle.**

**This is similar in concept to the previous question “Countries where**

**there are customers”, except we now want a count for each ContactTitle?**

**A.** Query(SELECT contact\_title,Count(contact\_title) as b FROM northwind\_db.customers

Group by contact\_title

Order by Count(contact\_title) desc; )

**18.We’d like to show, for each product, the associated Supplier. Show the**

**ProductID, ProductName, and the CompanyName of the Supplier. Sort**

**by ProductID.**

**This question will introduce what may be a new concept, the Join clause**

**in SQL. The Join clause is used to join two or more relational database**

**tables together in a logical way.**

**Here’s a data model of the relationship between Products and Suppliers?**

1. Query(SELECT a.Product\_id ,a.Product\_name,b.company\_name FROM northwind\_db.products as a

Left Join suppliers as b

ON a.supplier\_id=b.supplier\_id;)

**19.We’d like to show a list of the Orders that were made, including the**

**Shipper that was used. Show the OrderID, OrderDate (date only), and**

**CompanyName of the Shipper, and sort by OrderID.**

**In order to not show all the orders (there’s more than 800), show only**

**those rows with an OrderID of less than 10300?**

1. Query (SELECT a.order\_id,a.order\_date,b.company\_name FROM northwind\_db.orders as a

Inner Join shippers as b

On a.ship\_via=b.shipper\_id

Where order\_id < 10300

Order by order\_id;)