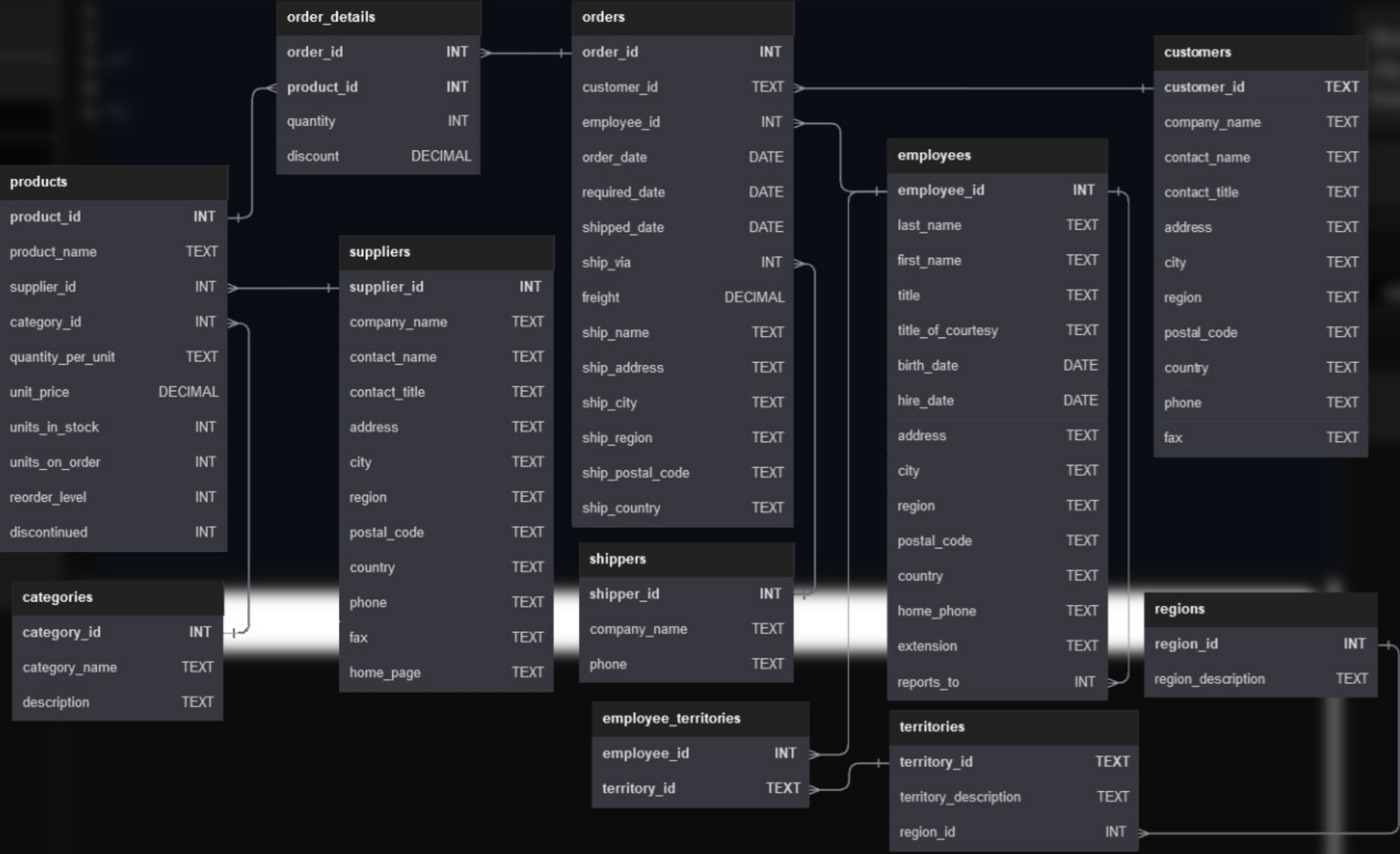




# Northwind Data Analysis using SQL

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1. Show all the contact\_name, address, city of all customers which are not from 'Germany', 'Mexico', 'Spain'.
2. Show the employee\_id, order\_id, customer\_id, required\_id, shipped\_date from all orders shipped later than the required date.
3. Show the category\_name and description from the categories table sorted by category\_name.
4. Show all the even numbered Order\_id from the orders table.
5. Show the city, company\_name, contact *name of all customers from cities which contains the letter 'L' in the city name, sorted by contact\_name.*
6. Show the company\_name, contact\_name, fax number of all customers that has a fax number.( not null)
- 7.
8. Show the first\_name,last\_name of the most recently hired employee.
9. Show the average unit price rounded to 2 decimal places, the total units in stock, total discontinued products from the products table.
10. Show the ProductName, CompanyName, Categoryname from the products, suppliers and categories table .
11. Show the category\_name and the average product unit price for each category rounded to 2 decimal places.
12. Show the city, company\_name, contact\_name from the customers and suppliers table merged together, Create a column which contains 'customers' or 'suppliers' depending on the table it came from.
13. Show the employee's first\_name and last\_name, a "num\_orders" column with a count of the orders taken,and a column called 'Shipped' and displays 'On Time' if the order shipped on time and 'Late' if the order shipped late. Order by employee last\_name, then by first\_name, and the descending by number of orders.



```

1 /*
2 Show all the contact_name, address,
3 city of all customers which are not from 'Germany', 'Mexico', 'Spain'
4 */
5 SELECT contact_name, address, city
6 FROM customers
7 WHERE country NOT IN ('Germany', 'Mexico', 'Spain')
8 ORDER BY city;
9
10
11 |

```

| contact_name     | address  | city         |
|------------------|--|--------------|
| Paula Wilson     | 2817 Milton Dr.                                | Albuquerque  |
| Rene Phillips    | 2743 Bering St.                                | Anchorage    |
| Carlos González  | Carrera 52 con Ave. Bolívar #65-98 Llano Largo | Barquisimeto |
| Giovanni Rovelli | Via Ludovico il Moro 22                        | Bergamo      |
| Yang Wang        | Hauptstr. 29                                   | Bern         |
| Jose Pavarotti   | 187 Suffolk Ln.                                | Boise        |
| Catherine Dewey  | Rue Joseph-Bens 532                            | Bruxelles    |
| Maria Larsson    | Åkergatan 24                                   | Bräcke       |



```

1 /*
2 Show the employee_id, order_id, customer_id, required_date,
3 shipped_date from all orders shipped later than the required date
4 */
5
6 SELECT employee_id,order_id,customer_id,required_date,shipped_date
7 FROM orders
8 WHERE shipped_date>required_date;
9

```

| employee_id | order_id | customer_id | required_date | shipped_date |
|-------------|----------|-------------|---------------|--------------|
| 6           | 10264    | FOLKO       | 2016-08-21    | 2016-08-23   |
| 6           | 10271    | SPLIR       | 2016-08-29    | 2016-08-30   |
| 2           | 10280    | BERGS       | 2016-09-11    | 2016-09-12   |
| 4           | 10302    | SUPRD       | 2016-10-08    | 2016-10-09   |
| 3           | 10309    | HUNGO       | 2016-10-17    | 2016-10-23   |
| 5           | 10320    | WARTH       | 2016-10-17    | 2016-10-18   |
| 8           | 10380    | HUNGO       | 2017-01-09    | 2017-01-16   |
| 6           | 10423    | GOURL       | 2017-02-06    | 2017-02-24   |

```
1 /*
2 Show the category_name and description from the categories table sorted by category_name.
3 */
4
5 SELECT category_name,description
6 FROM categories
7 ORDER BY category_name;
```

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

```
1 /*
2 Show all the even numbered Order_id from the orders table
3 */
4
5 SELECT order_id
6 FROM orders
7 WHERE order_id%2=0;
```

| order_id |
|----------|
| 10248    |
| 10250    |
| 10252    |
| 10254    |
| 10256    |
| 10258    |

```

1 /*
2 Show the city, company_name, contact_name of all customers from
3 cities which contains the letter 'L' in the city name, sorted by contact_name
4 */
5
6 SELECT city,company_name,contact_name
7 FROM customers
8 WHERE city LIKE '%L%'
9 ORDER BY contact_name;

```

| city          | company_name           | contact_name       |
|---------------|------------------------|--------------------|
| Leipzig       | Morgenstern Gesundkost | Alexander Feuer    |
| Sao Paulo     | Tradição Hipermercados | Anabela Domingues  |
| London        | Eastern Connection     | Ann Devon          |
| Toulouse      | La maison d'Asie       | Annette Roulet     |
| Sao Paulo     | Familia Arquibaldo     | Aria Cruz          |
| Lander        | Split Rail Beer & Ale  | Art Braunschweiger |
| San Cristóbal | HILARION-Abastos       | Carlos Hernández   |
| Bruxelles     | Maison Dewey           | Catherine Dewey    |



```

1 /*
2 Show the company_name, contact_name, fax number of all customers that has a fax number. (not null)
3 */
4
5 SELECT company_name,contact_name,fax
6 FROM customers
7 WHERE fax IS NOT NULL;

```

| company_name                       | contact_name       | fax            |
|------------------------------------|--------------------|----------------|
| Alfreds Futterkiste                | Maria Anders       | 030-0076545    |
| Ana Trujillo Emparedados y helados | Ana Trujillo       | (5) 555-3745   |
| Around the Horn                    | Thomas Hardy       | (171) 555-6750 |
| Berglunds snabbköp                 | Christina Berglund | 0921-12 34 67  |
| Blauer See Delikatessen            | Hanna Moos         | 0621-08924     |
| Blondesddsl père et fils           | Frédérique Citeaux | 88.60.15.32    |
| Bólido Comidas preparadas          | Martín Sommer      | (91) 555 91 99 |
| Bon app'                           | Laurence Lebihan   | 91.24.45.41    |

```
1 /*
2 Show the first_name, last_name of the most recently hired employee.
3 */
4
5 SELECT first_name, last_name, MAX(hire_date)
6 FROM employees;
```

| first_name | last_name | MAX(hire_date) |
|------------|-----------|----------------|
| Anne       | Dodsworth | 2014-11-15     |

```
1 /*
2 Show the average unit price rounded to 2 decimal places, the total units in stock,
3 total discontinued products from the products table.
4 */
5
6 SELECT ROUND(AVG(unit_price),2),SUM(units_in_stock) AS total_units_in_stock,
7         SUM(discontinued) AS total_discontinued
8 FROM products;
```

| ROUND(AVG(unit_price),2) | total_units_in_stock | total_discontinued |
|--------------------------|----------------------|--------------------|
| 28.87                    | 3119                 | 8                  |

```

1 /*
2 Show the ProductName, CompanyName, CategoryName from the products, suppliers, and categories table
3 */
4
5 SELECT p.product_name,s.company_name,c.category_name|
6 FROM products p
7 JOIN suppliers s ON s.supplier_id=p.supplier_id
8 JOIN categories c ON c.category_id=p.category_id;

```

| product_name                    | company_name               | category_name |
|---------------------------------|----------------------------|---------------|
| Chai                            | Exotic Liquids             | Beverages     |
| Chang                           | Exotic Liquids             | Beverages     |
| Aniseed Syrup                   | Exotic Liquids             | Condiments    |
| Chef Anton's Cajun Seasoning    | New Orleans Cajun Delights | Condiments    |
| Chef Anton's Gumbo Mix          | New Orleans Cajun Delights | Condiments    |
| Grandma's Boysenberry Spread    | Grandma Kelly's Homestead  | Condiments    |
| Uncle Bob's Organic Dried Pears | Grandma Kelly's Homestead  | Produce       |
| Northwoods Cranberry Sauce      | Grandma Kelly's Homestead  | Condiments    |



```

1 /*
2 Show the category_name and the average product unit
3 price for each category rounded to 2 decimal places.
4 */
5
6 SELECT c.category_name,ROUND(AVG(p.unit_price),2) AS avg_unit_price
7 FROM categories c
8 JOIN products p ON p.category_id=c.category_id
9 GROUP BY category_name;

```

| category_name  | avg_unit_price |
|----------------|----------------|
| Beverages      | 37.98          |
| Condiments     | 23.06          |
| Confections    | 25.16          |
| Dairy Products | 28.73          |
| Grains/Cereals | 20.25          |
| Meat/Poultry   | 54.01          |
| Produce        | 32.37          |
| Seafood        | 20.68          |

```

1 /*Show the city, company_name, contact_name from the customers and suppliers table merged together.
2 Create a column which contains 'customers' or 'suppliers' depending on the table it came from.
3 */
4
5 SELECT city,company_name,contact_name,'customers' AS relationship
6 FROM customers
7 UNION ALL
8 SELECT city,company_name,contact_name,'suppliers' AS relationship
9 FROM suppliers;

```

| city        | company_name                       | contact_name       | relationship |
|-------------|------------------------------------|--------------------|--------------|
| Berlin      | Alfreds Futterkiste                | Maria Anders       | customers    |
| México D.F. | Ana Trujillo Emparedados y helados | Ana Trujillo       | customers    |
| México D.F. | Antonio Moreno Taquería            | Antonio Moreno     | customers    |
| London      | Around the Horn                    | Thomas Hardy       | customers    |
| Luleå       | Berglunds snabbköp                 | Christina Berglund | customers    |
| Mannheim    | Blauer See Delikatessen            | Hanna Moos         | customers    |



```

1 /*
2 Show the employee's first_name and last_name, a "num_orders" column with a count of the orders taken,
3 and a column called "Shipped" that displays "On Time" if
4 the order shipped on time and "Late" if the order shipped late.
5 Order by employee last_name, then by first_name, and then descending by number of orders.
6 */
7
8
9 SELECT e.first_name,e.last_name,COUNT(order_id) AS num_of_orders,
10 CASE
11     WHEN o.shipped_date<required_date THEN 'On Time'
12     ELSE 'Late'
13 END AS shipped
14 FROM employees e
15     JOIN orders o ON o.employee_id=e.employee_id
16 GROUP BY e.employee_id,shipped
17 ORDER BY last_name,first_name,COUNT(*) DESC;

```

| first_name | last_name | num_of_orders | shipped |
|------------|-----------|---------------|---------|
| Steven     | Buchanan  | 41            | On Time |
| Steven     | Buchanan  | 1             | Late    |
| Laura      | Callahan  | 95            | On Time |
| Laura      | Callahan  | 9             | Late    |
| Nancy      | Davolio   | 117           | On Time |
| Nancy      | Davolio   | 6             | Late    |
| Anne       | Dodsworth | 37            | On Time |
| Anne       | Dodsworth | 6             | Late    |