Analysis of data from a chain of superstores

- Show the category_name and description from the categories table sorted by category_name.

```
select category_name, description from
categories
order by category_name
```

- Show all the contact_name, address, city of all customers which are not from 'Germany', 'Mexico', 'Spain'

```
select contact_name,
            address, city from customers
      where country not
in('Germany','Mexico','Spain')
```

- Show order_date, shipped_date, customer_id, Freight of all orders placed on 2018 Feb 26

```
select order_date, shipped_date, customer_id,
freight
from orders
where order_date= '2018-02-26'
```

- Show the employee_id, order_id, customer_id, required_date, shipped_date from all orders shipped later than the required date

```
select employee_id, order_id, customer_id,
            required_date, shipped_date from
orders
      where shipped_date>required_date
```

- Show all the even numbered Order_id from the orders table

```
select order_id from orders
where order_id%2 =0
```

- 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

```
select city, company_name, contact_name
```

```
from customers where city like '%L%'
order by contact_name
```

- Show the company_name, contact_name, fax number of all customers that has a fax number. (not null)

```
select company_name, contact_name, fax
from customers where fax is not null
```

- Show the first_name, last_name. hire_date of the most recently hired employee.

```
select first_name, last_name, max(hire_date) as
hire_date
from employees
```

- Show the average unit price rounded to 2 decimal places, the total units in stock, total discontinued products from the products table.

```
select round(avg(unit_price),2),
sum(units_in_stock) as total_units,
count(case when discontinued =1 then  1 end) as
total_disc from
products
```

- Show the ProductName, CompanyName, CategoryName from the products, suppliers, and categories table

```
select product_name, company_name,
category_name from categories as c
join products as p on
c.category_id = p.category_id
join suppliers as s on
p.supplier_id = s.supplier_id
```

- Show the category_name and the average product unit price for each category rounded to 2 decimal places.

```
select category_name,round(avg(unit_price),2)
from categories as c join products as p
```

```
on c.category_id = p.category_id
group by category_name
```

- 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.

```
select city,company_name, contact_name ,
'customers' as rel from customers
union
select city,company_name, contact_name,
'suppliers' as rel from suppliers
```

- 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" that displays "On Time" if the order shipped_date is less or equal to the required_date, "Late" if the order shipped late.

  Order by employee last_name, then by first_name, and then descending by number of orders.

```
select e.first_name, e.last_name,
count(o.order_id) as num_orders,
            (case when
o.shipped_date<=o.required_date then 'On Time'
             else 'Late'
       end) as Shipped
      from employees as e join orders as o on
      e.employee_id =o.employee_id
      group by e.first_name,e.last_name,Shipped
      order by e.last_name,
                  e.first_name,
            num_orders desc
```

- Show how much money the company lost due to giving discounts each year, order the years from most recent to least recent. Round to 2 decimal places

```
select year(o.order_date) as order_year,

        round(sum(p.unit_price*od.quantity*od.discount),2)
        as discount_amount
        from orders as o join order_details as od on
        o.order_id=od.order_id join products as p on
        od.product_id=p.product_id
        group by order_year
        order by order_year desc
```