

## Questions to answer

In the first part of the project, before you dive deeper into your own unguided data research, the interviewer at Unicorn asks you to answer the following questions utilizing SQL queries. This task is done individually

### List of columns per table

<b>customers</b> <ul style="list-style-type: none"><li>◦ customer_id</li><li>◦ customer_name</li><li>◦ customer_segment</li></ul>	<b>product</b> <ul style="list-style-type: none"><li>◦ product_id</li><li>◦ product_name</li><li>◦ product_category</li><li>◦ product_subcategory</li><li>◦ product_manufacturer</li></ul>
<b>order_details</b> <ul style="list-style-type: none"><li>◦ order_details_id</li><li>◦ order_id</li><li>◦ product_id</li><li>◦ quantity</li><li>◦ order_discount</li><li>◦ order_profits</li><li>◦ order_profit_ratio</li><li>◦ order_sales</li></ul>	<b>orders</b> <ul style="list-style-type: none"><li>◦ order_id</li><li>◦ customer_id</li><li>◦ order_date</li><li>◦ shipping_city</li><li>◦ shipping_state</li><li>◦ shipping_region</li><li>◦ shipping_country</li><li>◦ shipping_postal_code</li><li>◦ shipping_date shipping_mode</li></ul>

1. How many customers do we have in the data?
2. What was the city with the most profit for the company in 2015?
3. In 2015, what was the most profitable city's profit?
4. How many different cities do we have in the data?
5. Show the total spent by customers from low to high.

6. What is the most profitable city in the State of Tennessee?
7. What's the average annual profit for that city across all years?
8. What is the distribution of customer types in the data?
9. What's the most profitable product category on average in Iowa across all years?
10. What is the most popular product in that category across all states in 2016?
11. Which customer got the most discount in the data? (in total amount)
12. How widely did monthly profits vary in 2018?
13. Which order was the highest in 2015?
14. What was the rank of each city in the East region in 2015?
15. Display customer names for customers who are in the segment 'Consumer' or 'Corporate.' How many customers are there in total?
16. Calculate the difference between the largest and smallest order quantities for product id '100.'
17. Calculate the percent of products that are within the category 'Furniture.'
18. Display the number of duplicate products based on their product manufacturer.

Example: A product with an identical product manufacturer can be considered a duplicate. Show the product\_subcategory and the total number of products in the subcategory.

19. Show the order from *most* to *least* products and then by product\_subcategory name ascending.
20. Show the product\_id(s), the sum of quantities, where the total sum of its product quantities is greater than or equal to 100