Technical test

This test contains 2 exercises. Once you complete them, we will ask you to present your results and your methodology in the next interview.

Exercise 1 - Visualization

- Using the provided "SalesForce" dataset, create visualizations that would allow Sales Leaders to monitor their team's performance.
- The visualization would have a high-level view to compare across the different teams, and a deep-dive among individual teams.
- Ideally, variables used in the graphics are secondary derivatives variables (i.e. variables that are created by other variables), as opposed to using the variables as is from the dataset.
- Use the tools you have at your disposal for this task. The main focus should be on the analysis and the presentation of your results.

Exercise 2 - SQL query

- Given the following tables:
    - orders: {id, created_at, user_id}
    - order_line_items: {order_id, part_number, item_price, item_cost, quantity}
    - order_partner_line_items: {order_id, part_number, partner_id, item_price, quantity}
    - partner_feature: {id, contract_rate}
    - users: {id, email}

- Note, an order could consist of either Vention parts (order_line_items) and/or partner parts (order_partner_line_items). To get the item_cost of partner parts, you will need to reference the partner_feature table (order_partner_line_items.item_price * partner_feature.contract_rate).

- Write a SQL query in postgres, that will produce one row per month, starting from 2021, ordered by month; the report would have the count of orders, total gross sales, total_net_sales, and a string array listing all the order ids. Internal orders should be excluded from the report - users.email ending in 'vention.cc' could be used as filter.

Sample output:

order_month	count_orders	total_gross_sales	total_net_sales	list_order
2021-01-01	2	100	50	10001,10002
2022-02-01	3	600	300	10003,10004,10005
2021-03-01	1	50	35	10006
2021-04-01	4	800	420	10007, 10008, 10009, 10010
2021-05-01	1	60	30	10011