

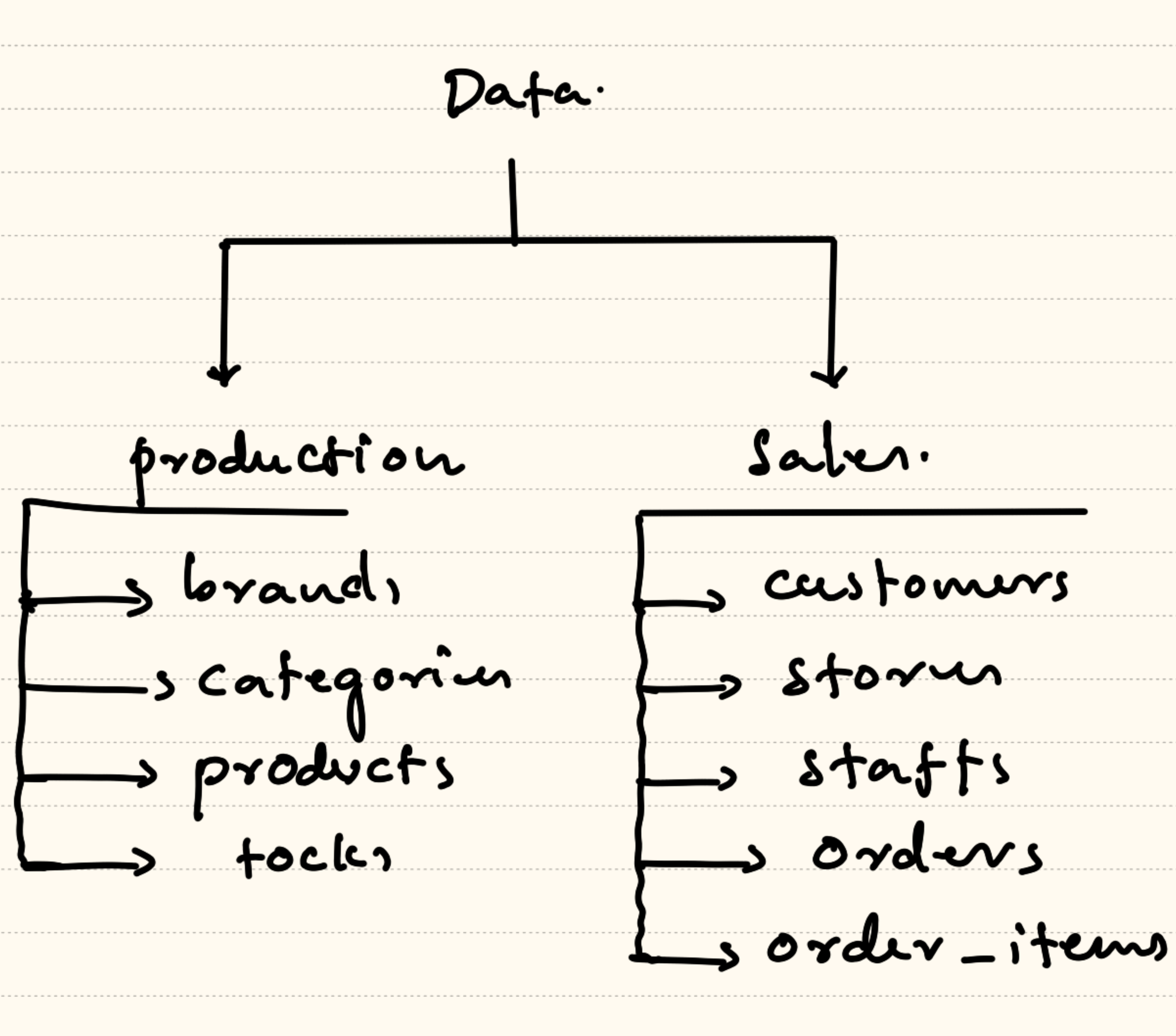
problem statement:-

- Rick's bike store has been facing a lot of financial issues. Rick's company stores spreaded across the town. Some of the stores makes good sales and some stores doesn't run at all.
- Rick approached me with the .csv data he has and with that he wants to know where is his weak spot and and he wants to gain some insights from the data he had.
- using the table's .csv data I used my SQL workbench to Rick's question which we had.
- Rick's wants to know about
 - * customers who lives in the California region
 - * Top 5 most expensive products from his stores
 - * Show stores ordered alphabetically by city, then store name.
 - * total no of orders placed by each customer.
 - * Display the total quantity of products sold per brand.
 - * Find the average list of products in each category.
 - * Count how many products are stocked per store.
 - * Find categories that have more than 10 products listed.
 - * Identify the customers who have placed more than 5 orders.

problem approach:-

- Rick is holding 2 schemas which is production and sales. These schemas contain 9 CSV files

Data hierarchy:-



- using Joins and different types of aggregations

I solved Rick's questions and what business needed.

- Through iterative testing, I validated results matched expected business logic and optimized queries for clarity and accuracy

Outcome and Report:-

- By applying SQL Joins and aggregation and filtering I turned fragmented data into actionable insights.

- This process reduced report generation time, minimized errors from manual data merging.

- The queries are stored for reuse and shared via Github for collaboration and version control

Further approach:-

- I analyzed the most of the queries using MySQL workbench that solved Rick's business problem

- To observe these insights in actionable graphs we can use Python (pandas, numpy)

- To put those data visualization into tables, charts we can use the tool Tableau.