



BY Jyotsna

TASK-3

Approach along with formulas



TO DO

Dashboarding Task : **Started using PowerBI (Not completed)**

Link to Excel File :

<https://docs.google.com/spreadsheets/d/1rTDY8fMDAluhcwXsRvvQcf4oIroH-fcU/edit?usp=sharing&ouid=103676608938964511475&rtpof=true&sd=true>

- Formulas for YTD Sales, YTD LY Sales, YoY Growth ($= \text{YTD Sales} / \text{YTD LY Sales} - 1$)
- Formulas for YTD Sales, YTD LY Sales, YoY Growth ($= \text{YTD Sales} / \text{YTD LY Sales} - 1$) but with Financial Year starting as April and not January
- Create a chart/table which shows only the top Sub-Category within each category (the top sub-category should dynamically change based on the selection)
- Write a formula to compute Target Achievement % ($= \text{Total Sales} / \text{Target}$). Target to be taken as user input and dashboard should allow user to change the target
- Create a bar chart :
 - With month as X-axis
 - For Y-axis, the chart should show either Sales or Quantity column depending on what the user wants to see
 - In the tooltip of each bar show the Top 5 Product Names for the month based on Profit
- Categorize the customers into **Score** between 1 to 4 based on the Total Sales value of the customer in the entire data
 - Bottom 25% customers – Score =1
 - Next 25% customers – Score =2
 - Next 25% customers – Score =3
 - Top 25% customers – Score =4

Formulas for YTD Sales, YTD LY Sales, YoY Growth (= YTD Sales / YTD LY Sales -1)

YTD -> Year to Date
LY -> Last Year
YoY -> Year-over-Year

```
#Create a calculated field for YTD Sales:
```

```
IF YEAR([Order Date]) = YEAR(TODAY())  
THEN SUM([Sales])  
ELSE 0  
END
```

CodeImage

```
#Create a calculated field for YTD LY Sales:
```

```
IF YEAR([Order Date]) = YEAR(TODAY()) - 1  
THEN SUM([Sales])  
ELSE 0  
END
```

CodeImage

```
# Create a calculated field for YoY Growth:
```

```
([YTD Sales] - [YTD LY Sales]) / [YTD LY Sales]
```

CodeImage

Formulas for YTD Sales, YTD LY Sales, YoY Growth (= YTD Sales / YTD LY Sales -1) but with Financial Year starting as April and not January

YTD -> Year to Date
LY -> Last Year
YoY -> Year-over-Year

```
# YTD Sales
IF DATETRUNC('month', [Order Date]) ≥ DATETRUNC('month', MAKEDATE(YEAR(TODAY()), 4, 1))
AND DATETRUNC('year', [Order Date]) = YEAR(TODAY())
THEN SUM([Sales])
ELSE 0
END
```

CodeImage

```
# YTD LY Sales
IF DATETRUNC('month', [Order Date]) ≥ DATETRUNC('month', MAKEDATE(YEAR(TODAY()) - 1, 4, 1))
AND DATETRUNC('year', [Order Date]) = YEAR(TODAY()) - 1
THEN SUM([Sales])
ELSE 0
END
```

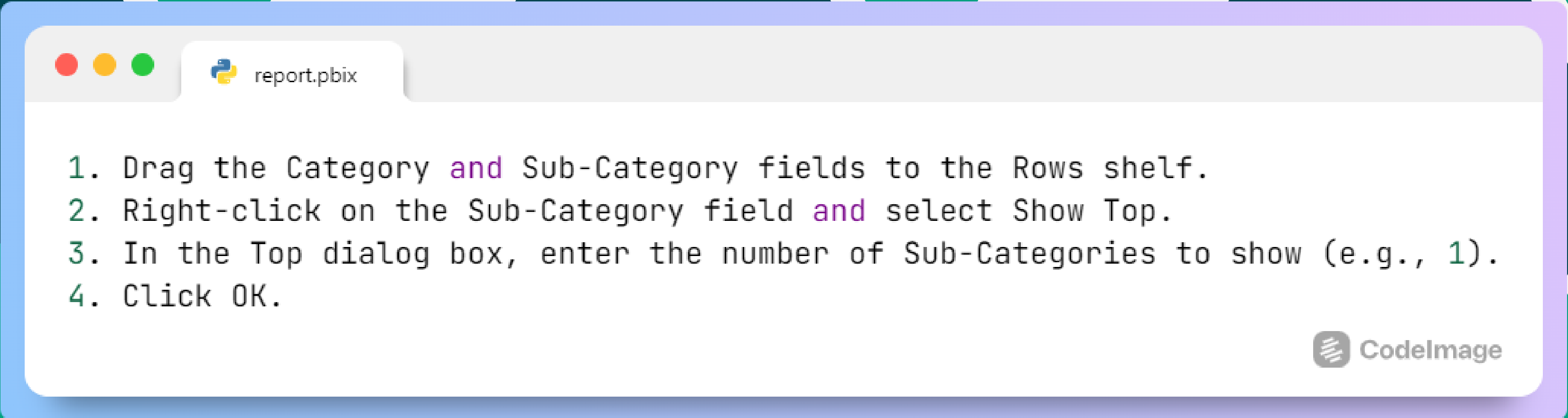
CodeImage

```
# YoY Growth
([YTD Sales] - [YTD LY Sales]) / [YTD LY Sales]
```

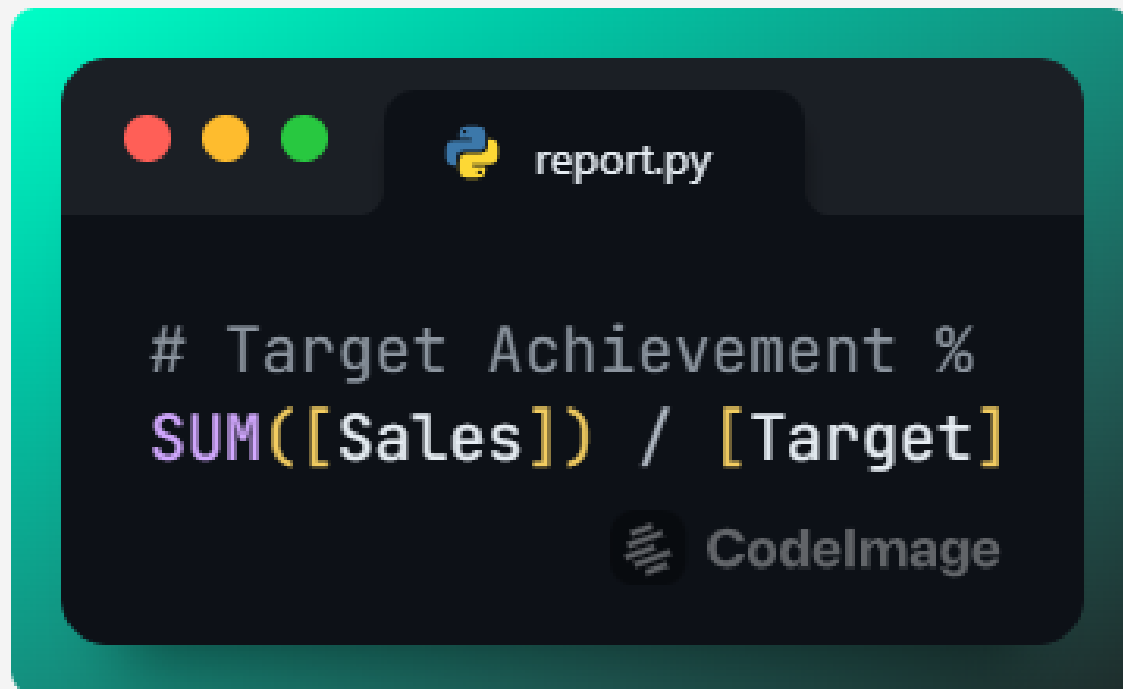
CodeImage

Create a chart/table which shows only the top Sub-Category within each category (the top sub-category should dynamically change based on the selection)

To create a chart/table which shows only the top Sub-Category within each category, we can use the following steps:

- 
1. Drag the Category **and** Sub-Category fields to the Rows shelf.
 2. Right-click on the Sub-Category field **and** select Show Top.
 3. In the Top dialog box, enter the number of Sub-Categories to show (e.g., **1**).
 4. Click OK.

Write a formula to compute Target Achievement % (= Total Sales / Target). Target to be taken as user input and dashboard should allow user to change the target



```
# Target Achievement %  
SUM([Sales]) / [Target]
```

CodeImage

The image shows a code editor window titled 'report.py' with a dark background. It contains a single line of code: '# Target Achievement %' followed by a new line with the formula 'SUM([Sales]) / [Target]'. The code is syntax-highlighted, with 'SUM' in purple, '[Sales]' in yellow, and '[Target]' in yellow. A 'CodeImage' logo is visible in the bottom right corner of the code area.



```
# Target Achievement % with parameter  
SUM([Sales]) / [Target Parameter]
```

CodeImage

The image shows a code editor window titled 'report.py' with a dark background. It contains a single line of code: '# Target Achievement % with parameter' followed by a new line with the formula 'SUM([Sales]) / [Target Parameter]'. The code is syntax-highlighted, with 'SUM' in purple, '[Sales]' in yellow, and '[Target Parameter]' in yellow. A 'CodeImage' logo is visible in the bottom right corner of the code area.

Create a bar chart with month as X-axis and either Sales or Quantity column depending on what the user wants to see. In the tooltip of each bar show the Top 5 Product Names for the month based on Profit

To create a bar chart with month as the X-axis and either Sales or Quantity column depending on what the user wants to see, we can use the following steps:

1. Drag the Month field to the Columns shelf.
2. Drag the Sales **or** Quantity field to the Rows shelf.
3. Right-click on the Rows shelf **and** select Show Quick Table Calculation.
4. Select Percent of Total **from** the Quick Table Calculation menu.

report.pbix


```
'''To show the Top 5 Product Names for the month based on Profit  
in the tooltip of each bar, we can use the following steps:'''
```

```
# 1. Create a calculated field for Top 5 Product Names:
```

```
RANK([Profit]) ≤ 5
```

```
# 2. Drag the Top 5 Product Names field to the Tooltips shelf
```

Categorize the customers into Score between 1 to 4 based on the Total Sales value of the customer in the entire data



```
'''Categorize the customers into Score between 1 to 4 based on the
Total Sales value of the customer in the entire data '''
CASE
WHEN [Total Sales] < PERCENTILE([Total Sales], 0.25) THEN 1
WHEN [Total Sales] ≥ PERCENTILE([Total Sales], 0.25) AND [Total Sales] < PERCENTILE([Total Sales], 0.5) THEN 2
WHEN [Total Sales] ≥ PERCENTILE([Total Sales], 0.5) AND [Total Sales]
```

 CodeImage

Calendar Year

All

State

All

Category

All

Sub-Category

All

Product Name

All

Segment

All

Sales Dashboard

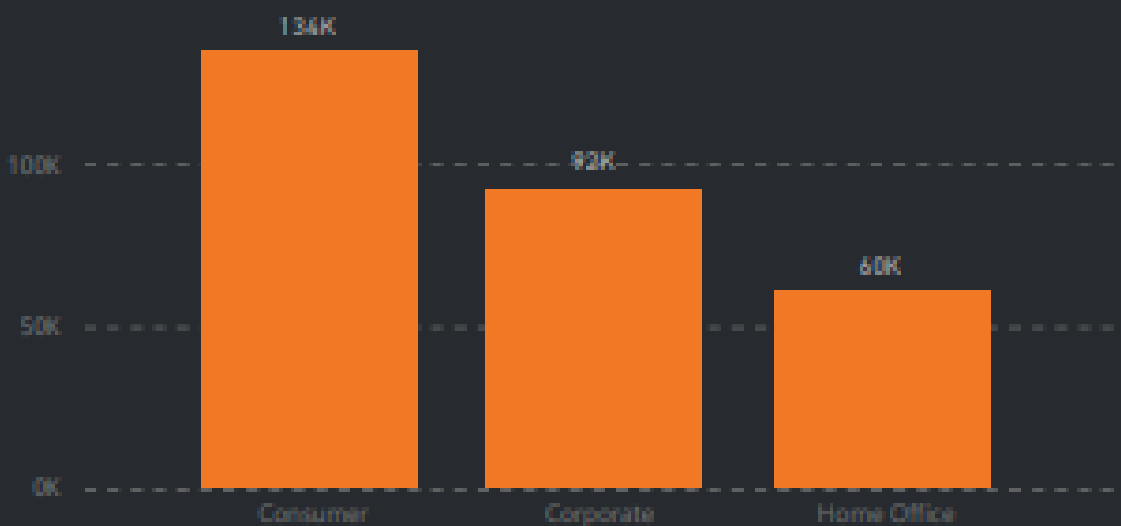
Overview

Regions

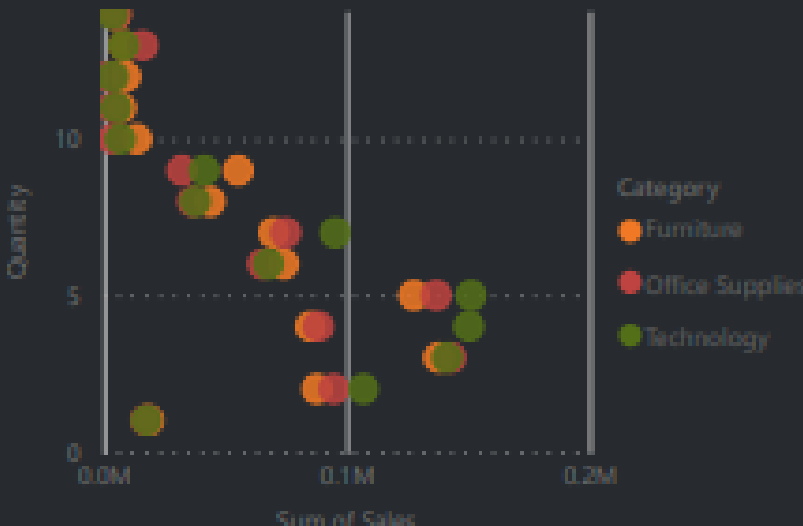
Shipping

Department

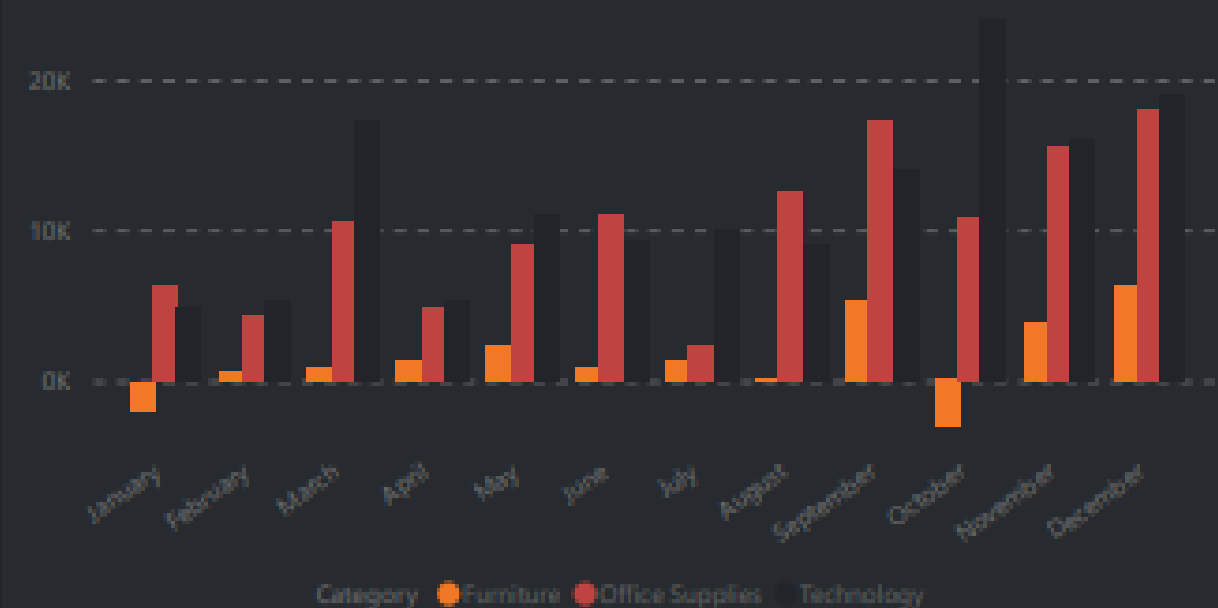
Net Profit by Segment



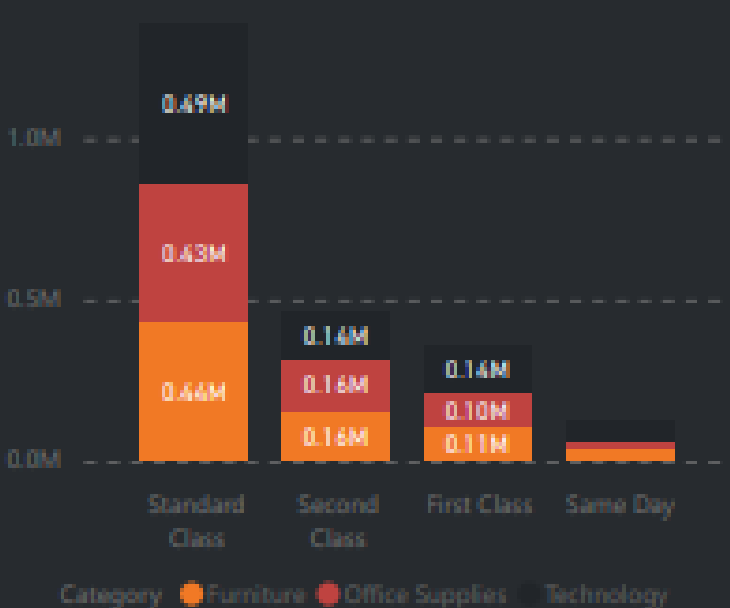
Quantity Sold by Product Cost



Net Profit by Department



Average Delivery Time

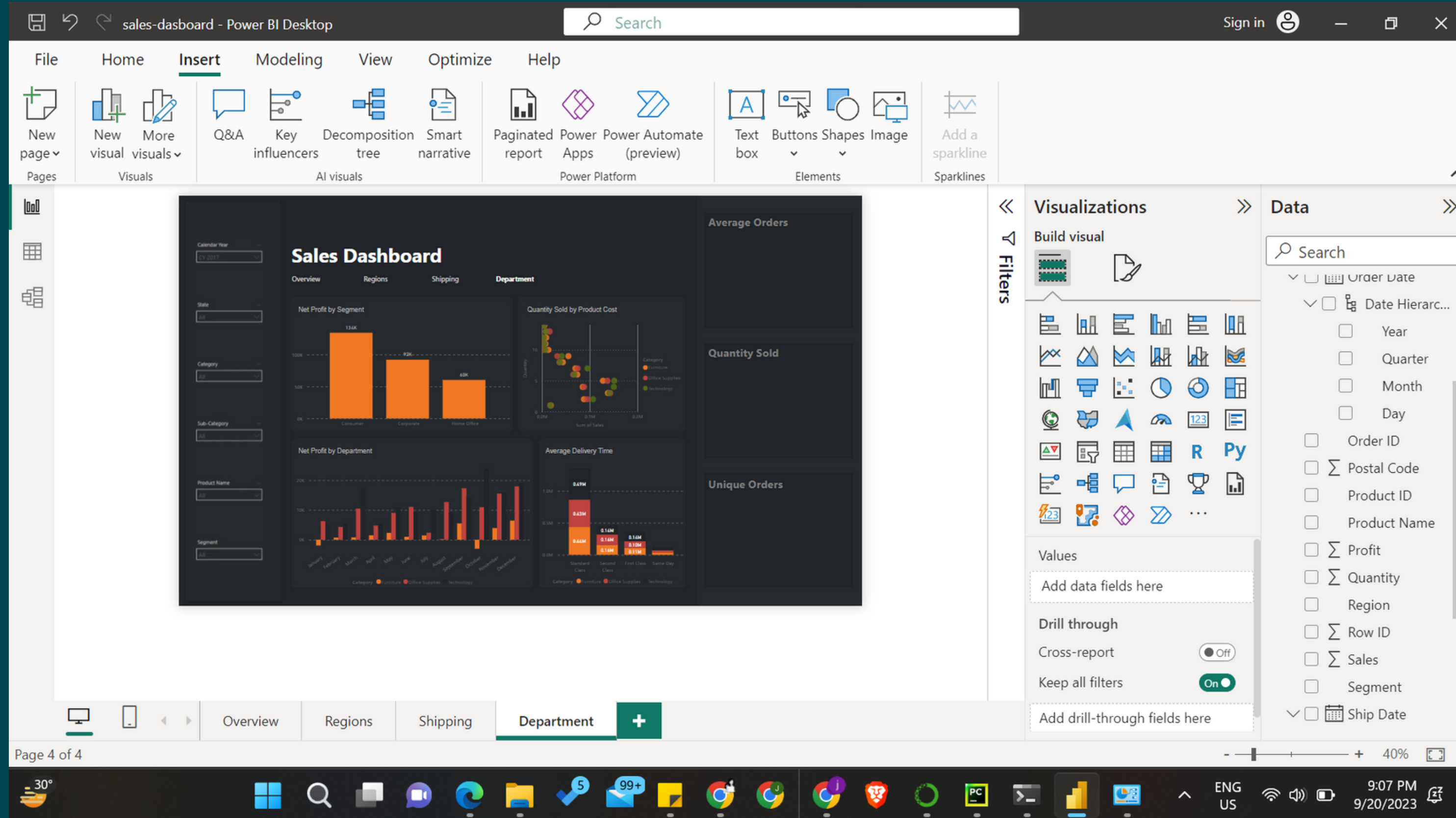


Average Orders

Quantity Sold

Unique Orders

Work in Progress



Check EDA at

LINK:

https://drive.google.com/file/d/1EfuqqFb2Y1DLA8Lg5H3iYKyjxo_fFZ_D/view?usp=sharing

