

Power BI Assignment

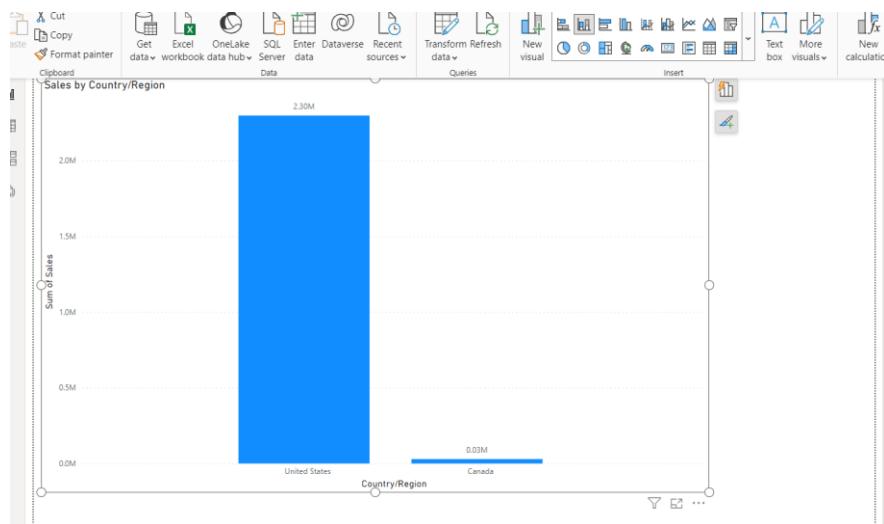
Day-1

1. What are the various versions of Power BI?

Answer: -POWER BI DESKTOP, POWER BI PRO AND POWER BI PREMIUM.

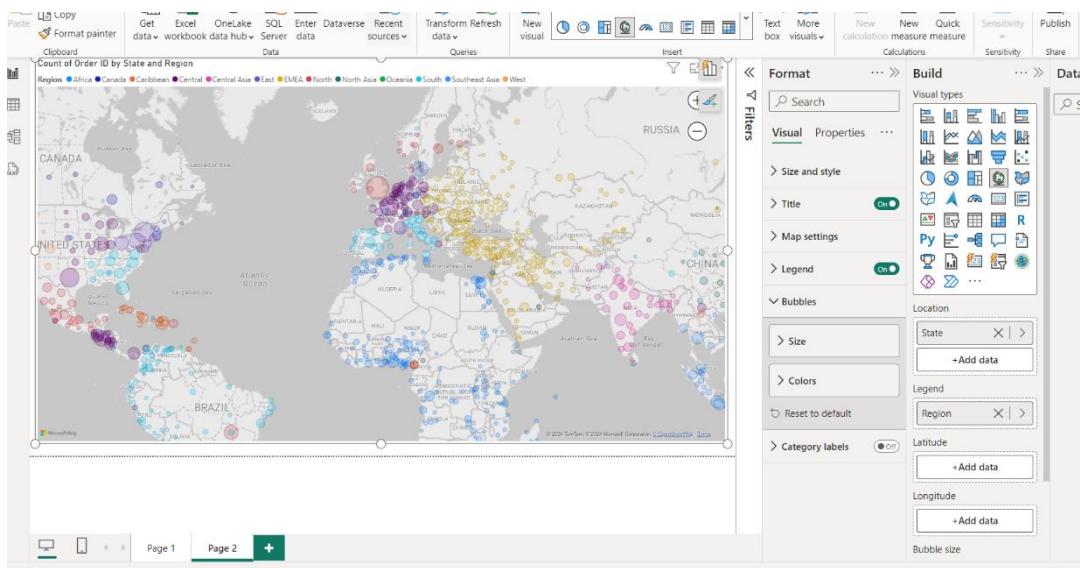
Day-2

2. Drag the Country from the region_data then in the report view and mention the name of the visual in the text box and add the labels in the visual.



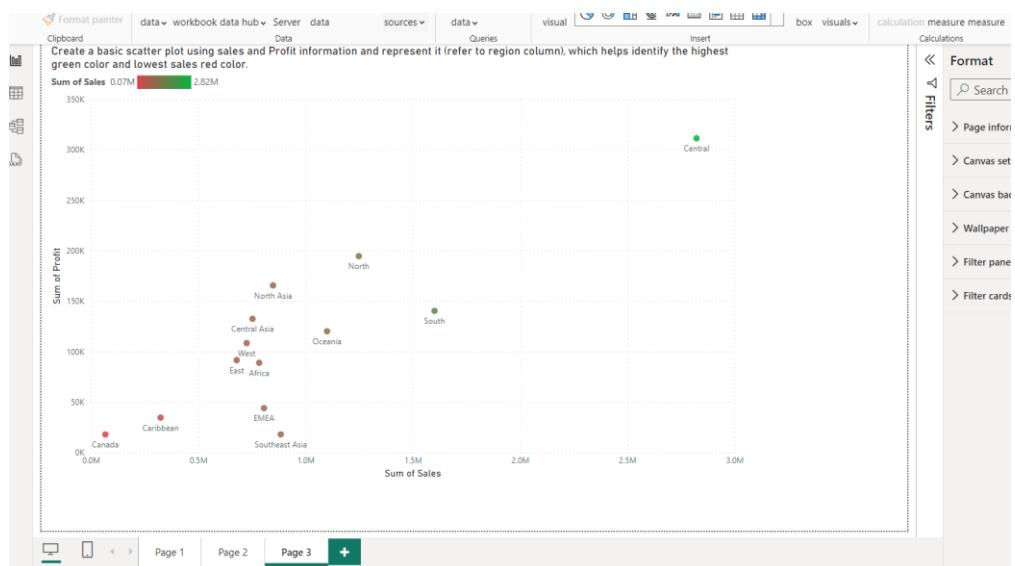
Day-3

3. Create a basic map visual on the report page using the Global superstore and Use the region column in the slicer visual to get interacted with the map visual.



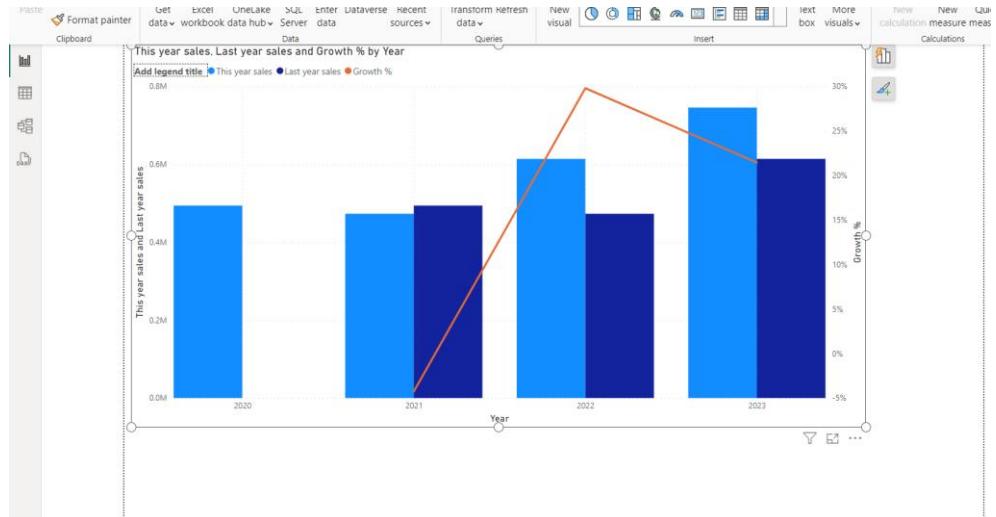
Day-4

4. Create a basic scatter plot using sales and Profit information and represent it (refer to region column), which helps identify the highest green color and lowest sales red color.



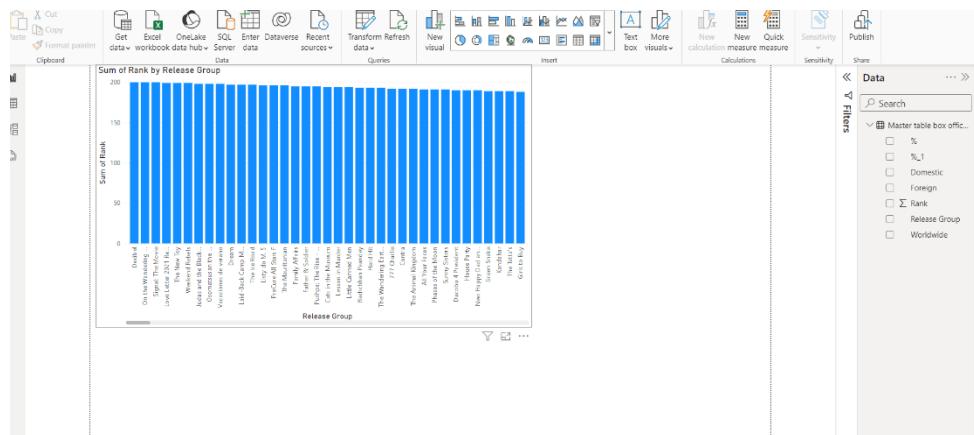
Day-5

5. Create a line and clustered chart and compare this year vs last year's sales along with growth % ?



Day-6

6. Import data from **2023 Worldwide Box Office - Box Office Mojo** and add the past 3 years of data in the Power Query editor, create a master table of the past 3 years of data, and load only master data in the power bi query editor or power bi desktop?



7. Delete unwanted columns, replace, or remove the error value in the master table and format the data and represent the column quality.

| Rank | Release Group | Worldwide | Domestic | Foreign |
|------|---|-----------------|---------------|-----------------|
| 1 | Spider-Man: No Way Home | \$1,912,233,593 | \$804,793,477 | \$1,107,440,118 |
| 2 | The Battle at Lake Changjin | \$902,548,476 | \$342,411 | \$902,206,065 |
| 3 | Hi, Mom | \$822,009,764 | - | \$822,009,764 |
| 4 | No Time to Die | \$774,153,007 | \$160,891,007 | \$613,262,000 |
| 5 | F9: The Fast Saga | \$726,229,501 | \$173,005,945 | \$553,223,556 |
| 6 | Detective Chinatown 3 | \$686,257,563 | - | \$686,257,563 |
| 7 | Venom: Let There Be Carnage | \$506,863,592 | \$213,550,366 | \$293,313,222 |
| 8 | Godzilla vs. Kong | \$470,116,094 | \$100,916,094 | \$369,200,000 |
| 9 | Shang-Chi and the Legend of the Ten Rings | \$432,243,292 | \$224,543,292 | \$207,700,000 |
| 10 | Sing 2 | \$408,402,685 | \$162,790,990 | \$245,611,695 |
| 11 | Eternals | \$402,064,899 | \$164,870,234 | \$237,194,665 |
| 12 | Dune: Part One | \$402,027,830 | \$108,327,830 | \$293,700,000 |
| 13 | Black Widow | \$379,751,655 | \$183,651,655 | \$196,100,000 |
| 14 | Free Guy | \$331,826,598 | \$121,626,598 | \$209,900,000 |
| 15 | A Quiet Place Part II | \$297,372,261 | \$160,072,261 | \$137,300,000 |
| 16 | Encanto | \$256,786,742 | \$96,093,622 | \$160,693,120 |
| 17 | Cruella | \$233,503,234 | \$86,103,234 | \$147,400,000 |
| 18 | My Country, My Parents | \$221,831,086 | \$177,133 | \$221,653,953 |
| 19 | Jungle Cruise | \$220,889,446 | \$116,987,516 | \$103,901,930 |
| 20 | The Conjuring: The Devil Made Me Do It | \$206,431,050 | \$65,631,050 | \$140,800,000 |
| 21 | Raging Fire | \$205,842,393 | \$385,305 | \$205,457,088 |
| 22 | Ghostbusters: Afterlife | \$204,334,455 | \$129,360,575 | \$74,973,880 |
| 23 | Chinese Doctors | \$197,143,218 | - | \$197,143,218 |
| 24 | Cliff Walkers | \$181,325,565 | \$152,972 | \$181,172,593 |
| 25 | The Suicide Squad | \$168,717,425 | \$55,817,425 | \$112,900,000 |
| 26 | Jujutsu Kaisen 0 | \$166,760,828 | \$34,542,754 | \$132,218,074 |
| 27 | Space Jam: A New Legacy | \$163,692,228 | \$70,592,228 | \$93,100,000 |
| 28 | The Matrix Resurrections | \$157,386,805 | \$37,686,805 | \$119,700,000 |

Day-7

8. Add all 3 tables from the model and create a table to show the detailed information for each day wise the sum of order quantity, shipped quantity, and delivered quantity. Kindly use a card visual to show the

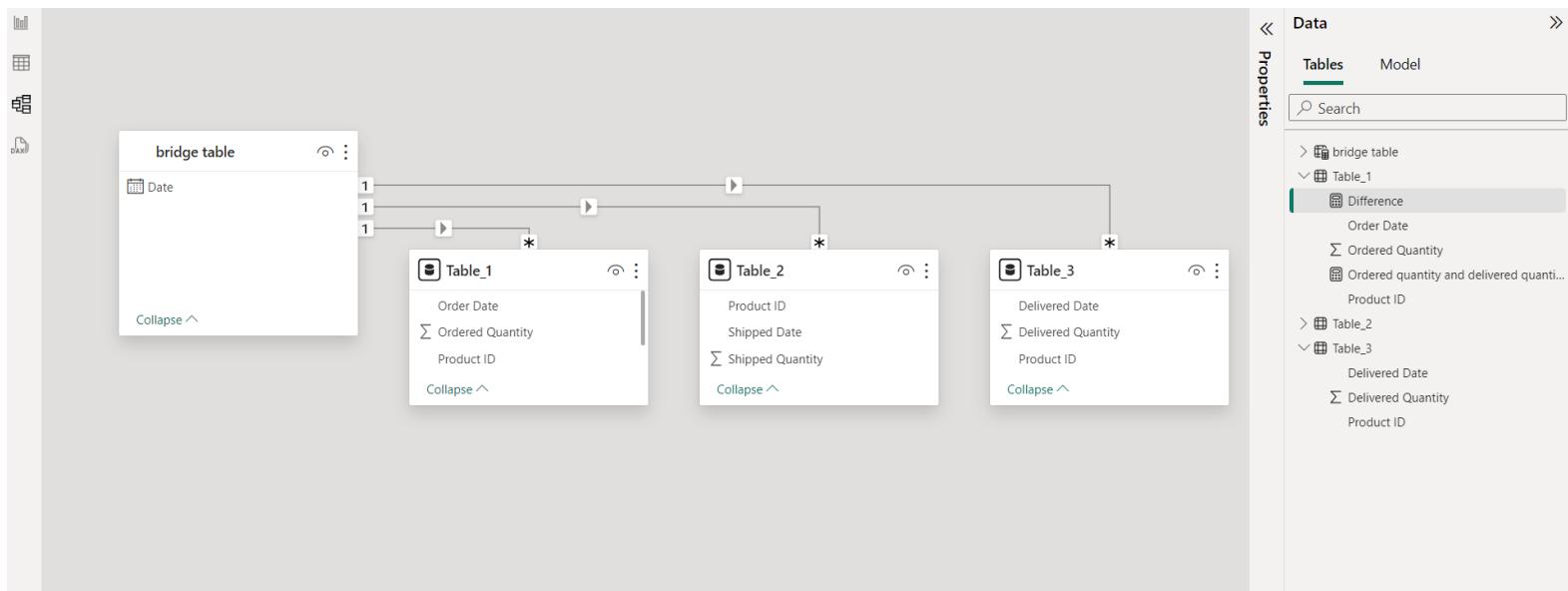
difference between the total order quantity and the shipped quantity, the 2nd difference between total order quantity and delivered quantity, using quick measure.

The screenshot shows the Power BI desktop interface with the following components:

- Clipboard:** Standard clipboard operations like Paste, Cut, Copy, and Format painter.
- Data:** Data sources including Get data, Excel, OneLake, SQL, Enter data, Dataverse, Recent sources, and Transform data.
- Queries:** A list of queries: Data, New visual, Insert, Text box, More visuals, New calculation measure, Quick measure, Sensitivity, Publish, and Share.
- Table:** A data table titled "Data" with columns: Day, Sum of Ordered Quantity, Sum of Shipped Quantity, and Sum of Delivered Quantity. The table contains 28 rows of data from day 1 to day 27, plus a Total row at the bottom.
- Visuals:**
 - A large text box visual showing "Sum of Ordered Quantity" with the value "15K".
 - A large text box visual showing "Sum of Shipped Quantity" with the value "15K".
 - A large text box visual showing "Sum of Delivered Quantity" with the value "14K".
 - A text box visual showing "Ordered quantity and delivered quantity" with the value "1K".
 - A text box visual showing "Difference" with the value "282".
- Filters:** A sidebar showing filters applied to the data. Under "bridge table", "Date" is selected with "Day" checked. Under "Table_1", "Ordered Quantity" is checked. Under "Table_2", "Shipped Date" is checked. Under "Table_3", "Delivered Date" is checked.

| Day | Sum of Ordered Quantity | Sum of Shipped Quantity | Sum of Delivered Quantity |
|-------|-------------------------|-------------------------|---------------------------|
| 1 | 540 | 495 | 401 |
| 2 | 429 | 538 | 582 |
| 3 | 460 | 668 | 289 |
| 4 | 559 | 573 | 518 |
| 5 | 439 | 458 | 701 |
| 6 | 613 | 484 | 675 |
| 7 | 339 | 468 | 405 |
| 8 | 434 | 390 | 519 |
| 9 | 404 | 660 | 499 |
| 10 | 470 | 290 | 452 |
| 11 | 500 | 381 | 437 |
| 12 | 483 | 355 | 309 |
| 13 | 605 | 484 | 494 |
| 14 | 380 | 515 | 344 |
| 15 | 316 | 506 | 242 |
| 16 | 469 | 618 | 363 |
| 17 | 448 | 370 | 595 |
| 18 | 575 | 302 | 490 |
| 19 | 544 | 421 | 341 |
| 20 | 421 | 466 | 329 |
| 21 | 393 | 530 | 449 |
| 22 | 331 | 520 | 249 |
| 23 | 754 | 438 | 375 |
| 24 | 477 | 347 | 497 |
| 25 | 778 | 334 | 580 |
| 26 | 526 | 766 | 458 |
| 27 | 437 | 498 | 384 |
| Total | 14995 | 14713 | 13710 |

- If there is a difficulty with tables having many-to-many relationships. Create an intermediate table (also known as a bridge table) to handle many-to-many relationship issues.



Day-8

10. Refer to question no. 6! After importing all the 3 years of the data, kindly add the custom column of specific year data for e.g. (if you have imported the data for the year 2023, please create a new column called year and add 2023 for each row).

Jose New Query Data Sources Parameters Query Manage Columns Reduce Rows Sort Transform Combine AI Insights

Queries [4]

Box office mojo 2023

Box office mojo 2022

Box office mojo 2021

Master table box office...

= Table.AddColumn(#"Removed Columns", "Year", each "2023", type text)

| | A ^b c Release Group | A ^b c Worldwide | A ^b c Domestic | A ^b c Foreign | A ^b c Year |
|----|---|----------------------------|---------------------------|--------------------------|-----------------------|
| 1 | 1 Barbie | \$1,445,638,421 | \$636,238,421 | \$809,400,000 | 2023 |
| 2 | 2 The Super Mario Bros. Movie | \$1,362,011,523 | \$574,934,330 | \$787,077,193 | 2023 |
| 3 | 3 Oppenheimer | \$968,213,540 | \$329,862,540 | \$638,351,000 | 2023 |
| 4 | 4 Guardians of the Galaxy Vol. 3 | \$845,555,777 | \$358,995,815 | \$486,559,962 | 2023 |
| 5 | 5 Fast X | \$704,875,015 | \$146,126,015 | \$558,749,000 | 2023 |
| 6 | 6 Spider-Man: Across the Spider-Verse | \$690,615,475 | \$381,311,319 | \$309,304,156 | 2023 |
| 7 | 7 Wonka | \$632,302,312 | \$218,402,312 | \$413,900,000 | 2023 |
| 8 | 8 The Little Mermaid | \$569,626,289 | \$298,172,056 | \$271,454,233 | 2023 |
| 9 | 9 Mission: Impossible - Dead Reckoning Part One | \$567,535,383 | \$172,135,383 | \$395,400,000 | 2023 |
| 10 | 10 Elemental | \$496,444,308 | \$154,426,697 | \$342,017,611 | 2023 |
| 11 | 11 Ant-Man and the Wasp: Quantumania | \$476,071,180 | \$214,504,909 | \$261,566,271 | 2023 |
| 12 | 12 John Wick: Chapter 4 | \$440,157,245 | \$187,131,806 | \$253,025,439 | 2023 |
| 13 | 13 Transformers: Rise of the Beasts | \$438,966,392 | \$157,066,392 | \$281,900,000 | 2023 |
| 14 | 14 Aquaman and the Lost Kingdom | \$434,381,226 | \$124,481,226 | \$309,900,000 | 2023 |
| 15 | 15 Meg 2: The Trench | \$397,700,317 | \$82,600,317 | \$315,100,000 | 2023 |
| 16 | 16 Indiana Jones and the Dial of Destiny | \$383,963,057 | \$174,480,468 | \$209,482,589 | 2023 |
| 17 | 17 The Hunger Games: The Ballad of Songbirds & Snakes | \$337,371,917 | \$166,350,594 | \$171,021,323 | 2023 |
| 18 | 18 Migration | \$292,179,645 | \$127,292,645 | \$164,887,000 | 2023 |
| 19 | 19 Five Nights at Freddy's | \$291,493,620 | \$137,275,620 | \$154,218,000 | 2023 |
| 20 | 20 Creed III | \$276,148,615 | \$156,248,615 | \$119,900,000 | 2023 |
| 21 | 21 The Flash | \$271,333,313 | \$108,133,313 | \$163,200,000 | 2023 |
| 22 | 22 The Nun II | \$269,467,073 | \$86,267,073 | \$183,200,000 | 2023 |
| 23 | 23 Taylor Swift: The Eras Tour | \$261,656,269 | \$180,756,269 | \$80,900,000 | 2023 |
| 24 | 24 Wish | \$254,795,156 | \$63,973,821 | \$190,821,335 | 2023 |
| 25 | 25 Sound of Freedom | \$250,570,396 | \$184,178,046 | \$66,392,350 | 2023 |
| 26 | 26 Napoleon | \$221,026,368 | \$61,524,375 | \$159,501,993 | 2023 |
| 27 | 27 Anyone But You | \$217,783,697 | \$88,309,369 | \$129,474,328 | 2023 |
| 28 | | | | | |

COLUMNS, 200 ROWS Column profiling based on top 1000 rows PREVIEW DOWNLOADED AT 11:34 PM

Query Settings

PROPERTIES Name Box office mojo 2023 All Properties

APPLIED STEPS Source Extracted Table From Html Promoted Headers Changed Type Removed Columns Inserted Literal

Day-9

Refer to Global superstore data.

- Create a map visual and use the drill down to show detailed information for each country by state. (For detailed information you can use the region slicer).

Themes

Page view ▾ Mobile layout Snap to grid Lock objects Filters pane manager Build Selection Performance analyzer Show panes

Country

- Afghanistan
- Albania
- Algeria
- Angola
- Argentina
- Armenia
- Australia
- Austria
- Azerbaijan
- Bahrain
- Bangladesh
- Barbados
- Belarus
- Belgium
- Benin
- Bolivia
- Bosnia and Herzegovina
- Brazil
- Bulgaria
- Burundi
- Cambodia
- Cameroon
- Canada

Page 2 of 2

Page 1 Page 2 +

Data

Filters

Search

Superstore

- Category
- City
- Country
- Customer ID
- Customer Name
- Discount
- Market
- Order Date
- Order ID
- Order Priority
- Postal Code
- Product ID
- Product Name
- Profit
- Quantity
- Region
- Row ID
- Sales
- Segment
- Ship Date
- Ship Mode
- Shipping Cost

80%

Themes

view ▾ layout Mobile Page options LOCK OBJECTS Format Performance analyzer Show panes

Sum of Profit
17.82K

Sum of Sales
66.93K

First Country

Canada

Sum of Profit by Segment

| Segment | Sum of Profit |
|-------------|---------------|
| Consumer | 17.82K |
| Corporate | 5.2K |
| Home Office | 3.2K |

Sum of Sales by Month

| Month | Sum of Sales |
|-----------|--------------|
| January | 8K |
| February | 7K |
| March | 5K |
| April | 4K |
| May | 4K |
| June | 5K |
| July | 5K |
| August | 10K |
| September | 3K |
| October | 3K |
| November | 3K |
| December | 3K |

Sum of Sales by Segment

| Segment | Sum of Sales | Percentage |
|-------------|--------------|------------|
| Consumer | 35.72K | 53.37% |
| Corporate | 19.31K | 28.86% |
| Home Office | 11.9K | 17.77% |

Data

Filters

Search

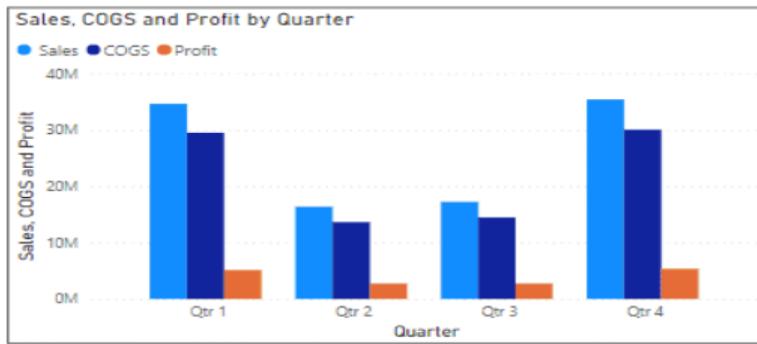
Superstore

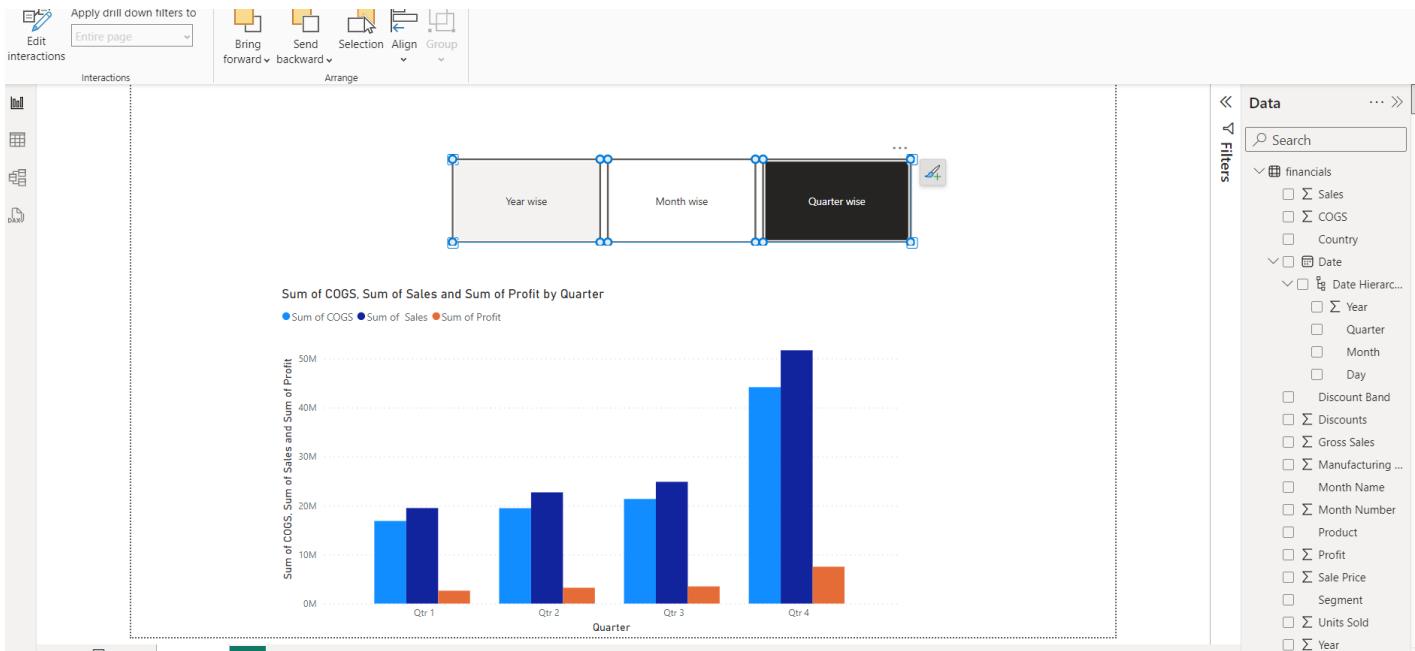
- Category
- City
- Country
- Customer ID
- Customer Name
- Discount
- Market
- Order Date
- Order ID
- Order Priority
- Postal Code
- Product ID
- Product Name
- Profit
- Quantity
- Region
- Row ID
- Sales
- Segment
- Ship Date
- Ship Mode
- Shipping Cost

Day-10

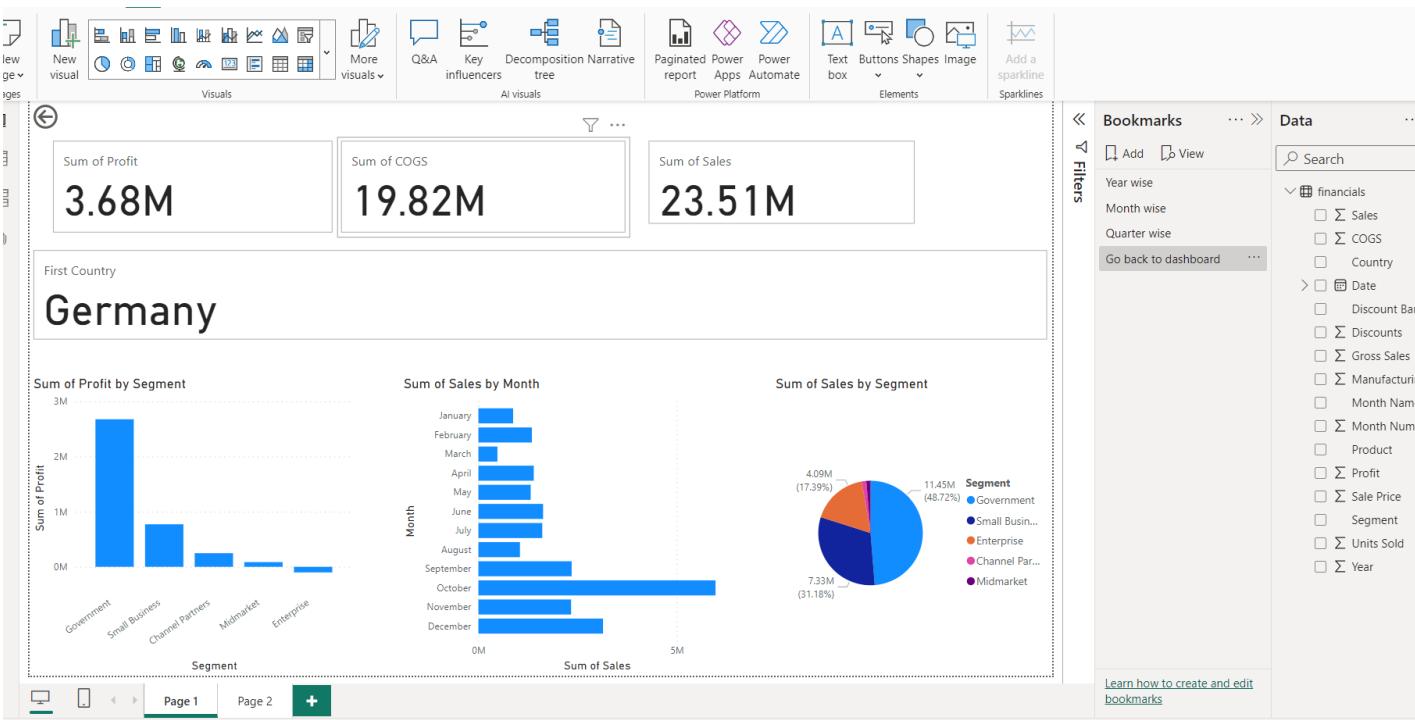
Refer to Financials sample data.

12. Create a clustered column chart referring to the order date and sales, then apply bookmarks based on date year, quarter, and month.





13. Create a country overview page and add another page that contains detailed information about the country with drill through options.



14. Add the reset image in which all the filters should get removed and the report page should be default in the country information page.

The screenshot shows the Power BI desktop application interface. On the left, there's a navigation bar with icons for Pages, Visuals, AI visuals, Power Platform, Elements, and Sparklines. Below this is a list of countries under a 'Country' filter section: Canada, France, Germany (selected), Mexico, and United States of America. In the center, there's a large green button labeled 'RESET'. To the right, there's a sidebar titled 'Filters' containing sections for Bookmarks, Data, and a search bar. The 'Data' section lists various financial metrics like Sales, COGS, and Profit. At the bottom of the sidebar, there's a link to 'Learn how to create and edit bookmarks'.

Day-11

15. Create a new summarize table with selected columns (region, country, sum of sales) from the global superstore and filter the region based on the given conditions, Central Asia, North, South & East.

The screenshot shows the Power BI Data Editor interface. At the top, there are several tabs: Name (Region), Format (Text), Summarization (Don't summarize), Data category (Uncategorized), Sort by column (Sort), Data groups (Groups), Manage relationships (Relationships), and New column (Calculations). Below these tabs is a table titled "1 Sample - SUMMARIZE(Superstore,Superstore[Region],Superstore[Country],Superstore[Sales])". The table has three columns: Country, Sales, and Region. The "Country" column lists "United States" multiple times with various sales values. The "Region" column lists 13 distinct values: East, West, Midwest, South, Northeast, North, Central, Mountain, Pacific, New England, New York, New Jersey, and New Hampshire. The "Sales" column lists corresponding sales figures for each entry. To the right of the table is a "Data" pane containing a tree view of the data structure, with "Region" selected under "Sample".

Day-12

16. Create a week column based on the order date from the global superstore data.
e.g. required output "Week-5"

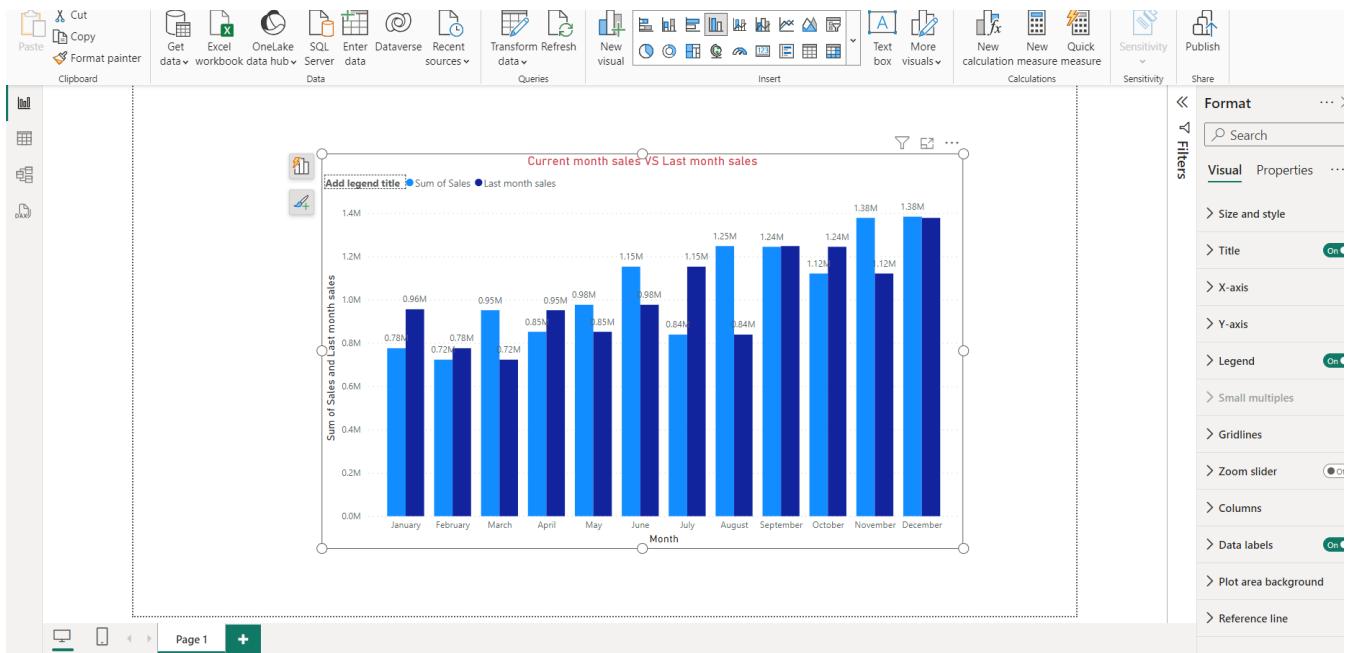
The screenshot shows the Power BI Data view interface. At the top, there are tabs for Structure, Formatting, Properties, Sort, Groups, Relationships, and Calculations. Below the tabs is a table with two columns: Date and Week number. The Date column lists dates from 01-02-2014 to 22-01-2011. The Week number column shows the value '5' for every row. To the right of the table is a sidebar titled 'Data' with a search bar and a tree view of measures: Order calendar > Date, Week number, and Superstore. A vertical bar labeled 'Quick measure' is also visible.

| Date | Week number |
|---------------------|-------------|
| 01-02-2014 00:00:00 | 5 |
| 31-01-2014 00:00:00 | 5 |
| 30-01-2014 00:00:00 | 5 |
| 29-01-2014 00:00:00 | 5 |
| 28-01-2014 00:00:00 | 5 |
| 27-01-2014 00:00:00 | 5 |
| 26-01-2014 00:00:00 | 5 |
| 02-02-2013 00:00:00 | 5 |
| 01-02-2013 00:00:00 | 5 |
| 31-01-2013 00:00:00 | 5 |
| 30-01-2013 00:00:00 | 5 |
| 29-01-2013 00:00:00 | 5 |
| 28-01-2013 00:00:00 | 5 |
| 27-01-2013 00:00:00 | 5 |
| 04-02-2012 00:00:00 | 5 |
| 03-02-2012 00:00:00 | 5 |
| 02-02-2012 00:00:00 | 5 |
| 01-02-2012 00:00:00 | 5 |
| 31-01-2012 00:00:00 | 5 |
| 30-01-2012 00:00:00 | 5 |
| 29-01-2012 00:00:00 | 5 |
| 29-01-2011 00:00:00 | 5 |
| 28-01-2011 00:00:00 | 5 |
| 27-01-2011 00:00:00 | 5 |
| 26-01-2011 00:00:00 | 5 |
| 25-01-2011 00:00:00 | 5 |
| 24-01-2011 00:00:00 | 5 |
| 22-01-2011 00:00:00 | 5 |

Table: Order calendar (1,461 rows, 28 filtered rows) Column: Week number (53 distinct values, 1 filtered distinct values)

Day-13

17. Create a table visual to show the current month's sales vs last month's sales.



Day-14

18. Insert the scroller custom visual and add it to the report page referring to the country and profit column.

The screenshot shows the Microsoft Power BI desktop application. The ribbon at the top has the following tabs: File, Home (selected), Insert, Modeling, View, Optimize, Help, Data, Queries, Insert, Build, Data, and Share. The main workspace is heavily redacted with a large black box. In the bottom left corner, there are navigation icons for monitor, printer, and page, followed by 'Page 2' and a '+' button. On the right side, the 'Build' pane is open, showing the 'Filters' section with a search bar and two dropdown menus: 'Filters on this page' and 'Filters on all pages', both with '+Add data field here' buttons. Below that is the 'Visual types' section with various chart icons. Under 'Category', 'Orders' is expanded, showing fields like Category, City, Country/Region, Customer ID, Customer Name, Discount, Order Date, Order ID, Postal Code, Product ID, Product Name, Profit, Quantity, Region, Row ID, Sales, Segment, Ship Date, Ship Mode, State/Province, and Sub-Category.

Day-15

19. Create a shared workspace and add the organization members to the workspace then publish the report.

NOTE: Unable to create workspace due to sign in is required.