

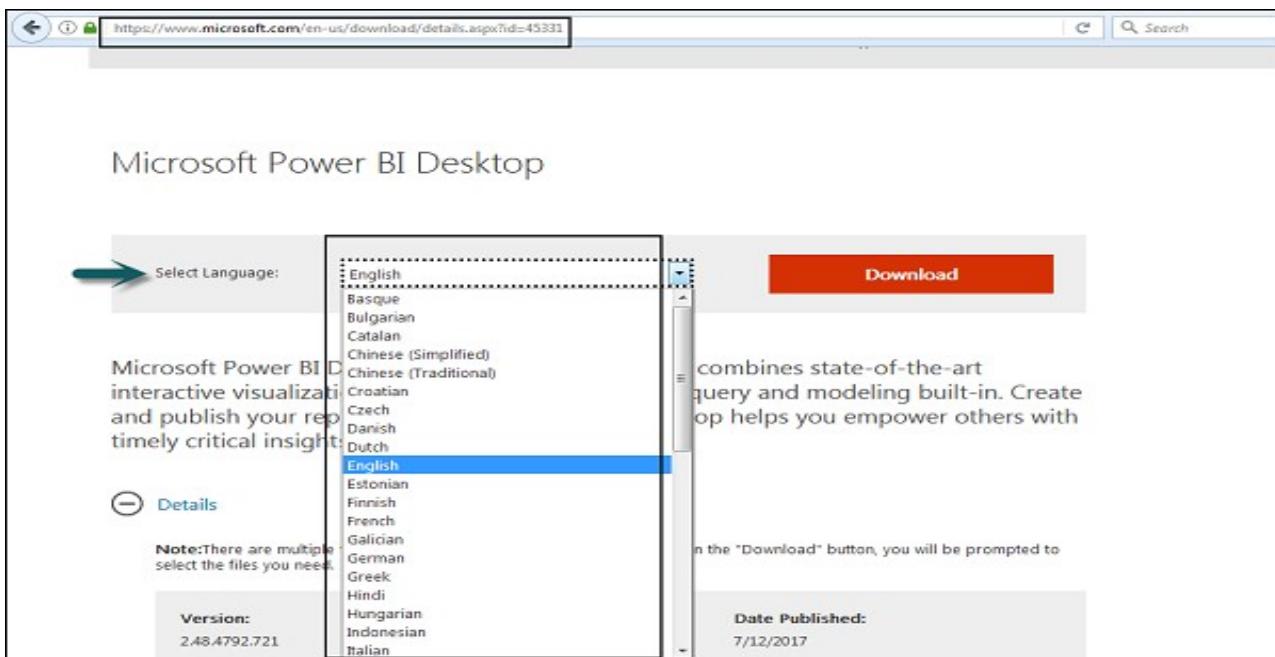
Experiment Number: 01

Aim:

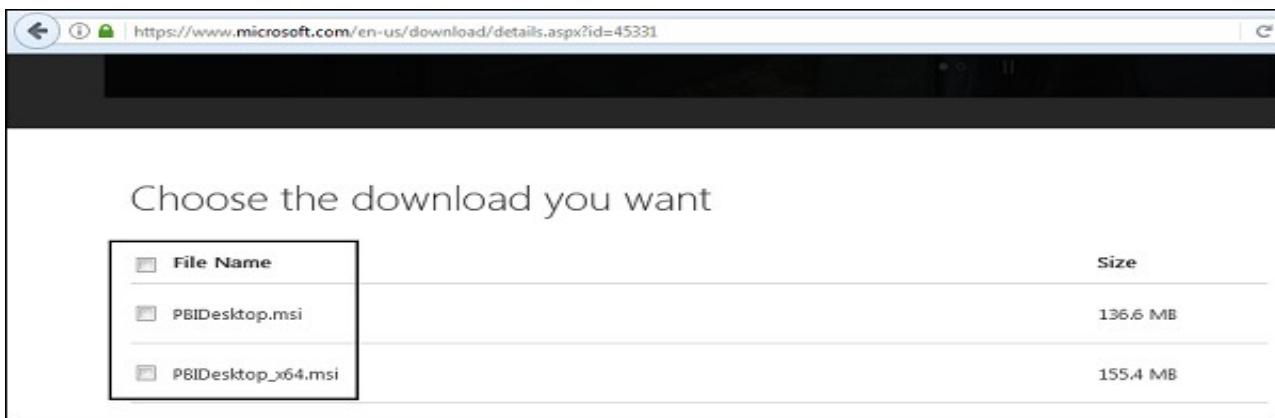
Installation and overview in power BI Desktop.

Procedure:

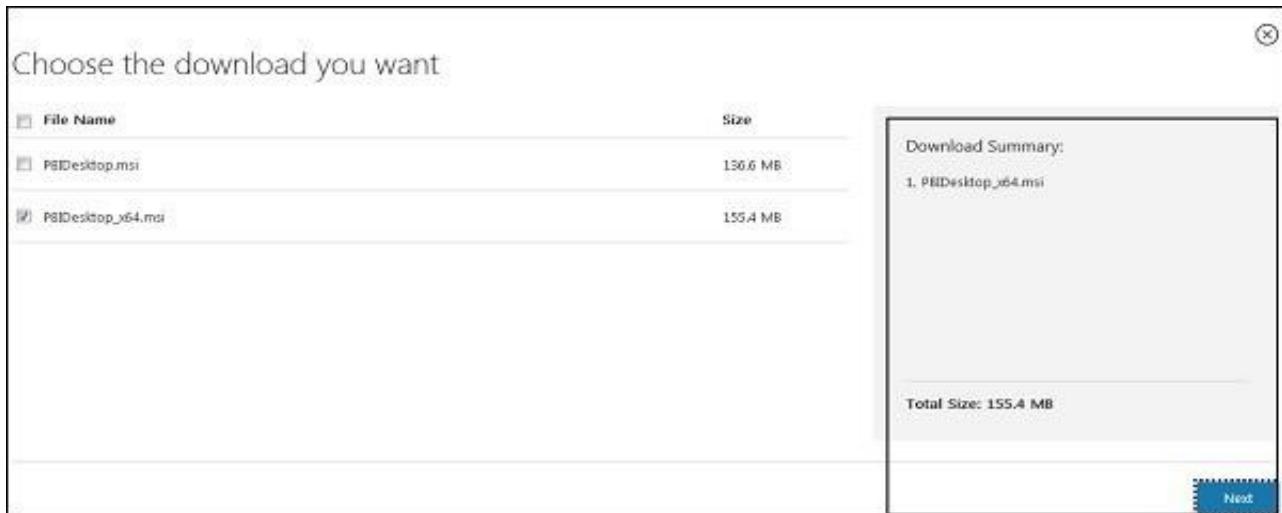
- Users can select a language in which they want to install Power BI and following files are available for download.



- This is the link to directly download Power BI files –
- <https://www.microsoft.com/en-us/download/details.aspx?id=45331>



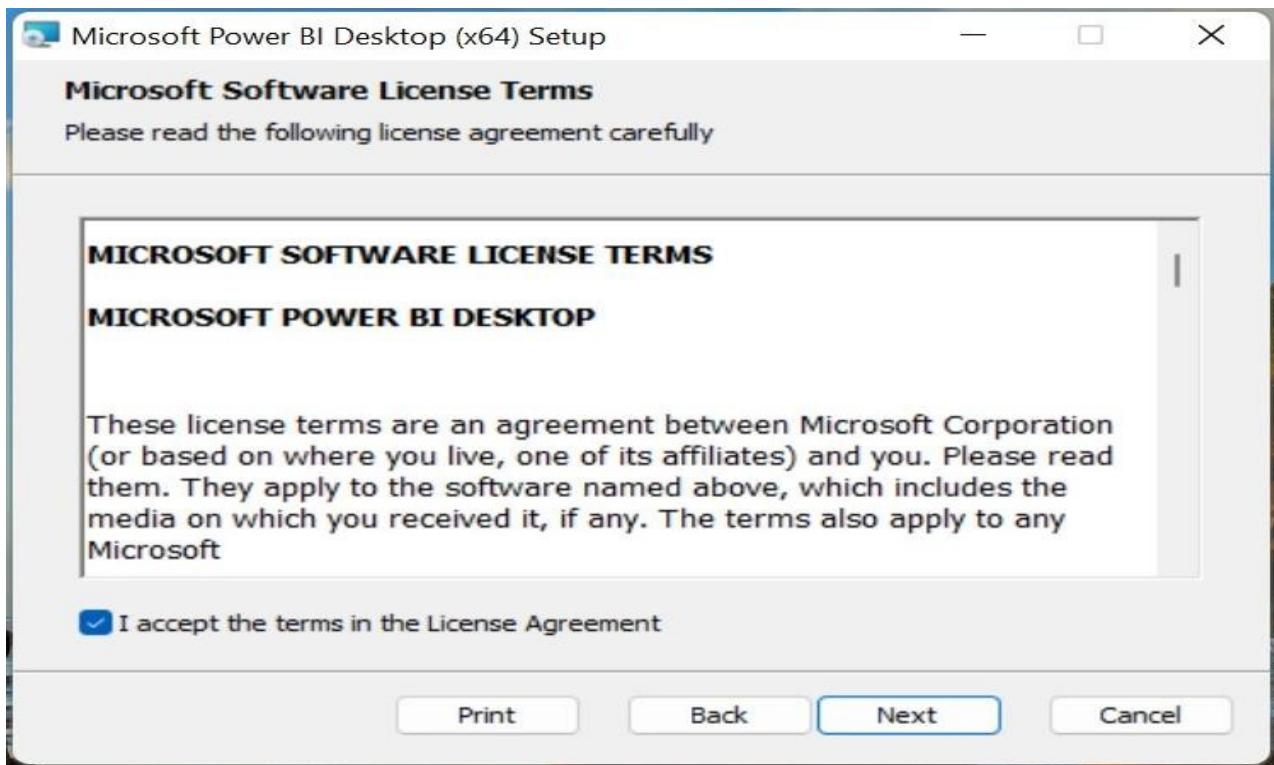
- PBIDesktop_x64.msi shows a 64-bit OS file. Select the file you want to install as per OS type and click Next. Save the installation file on the local drive.



- When you run the installation file, following screen is displayed.



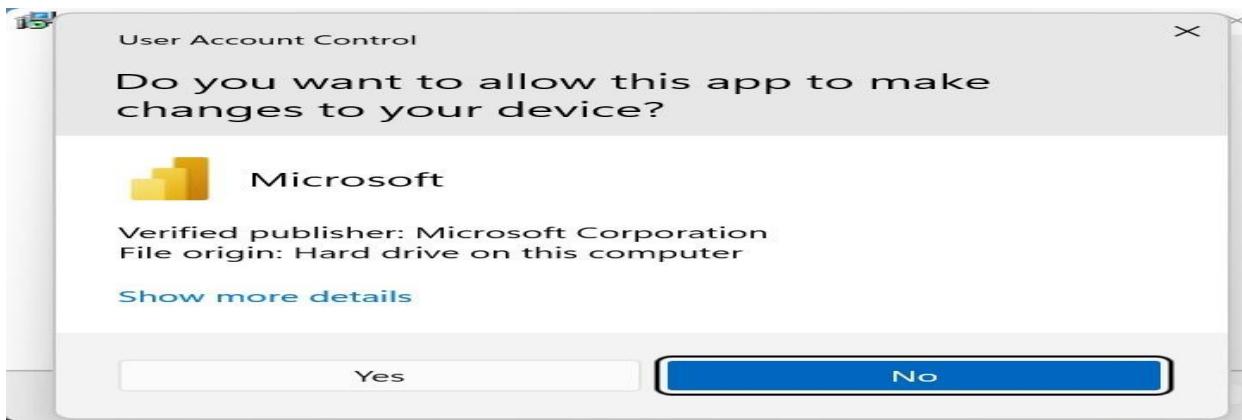
- Click on Next to continue the process of installing the software.



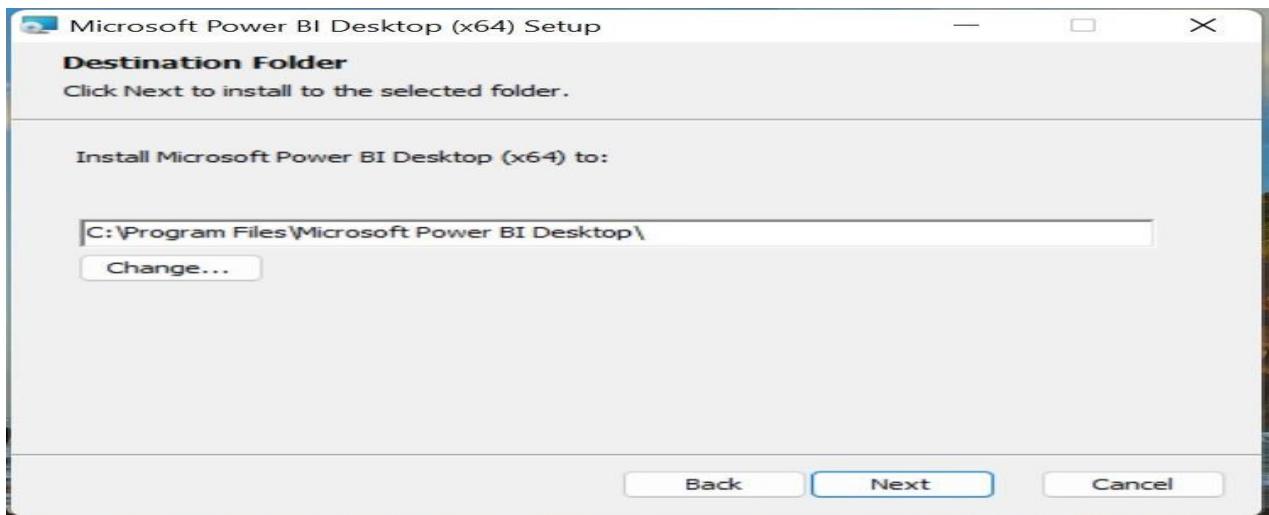
- Accept the License agreement and click on Next.



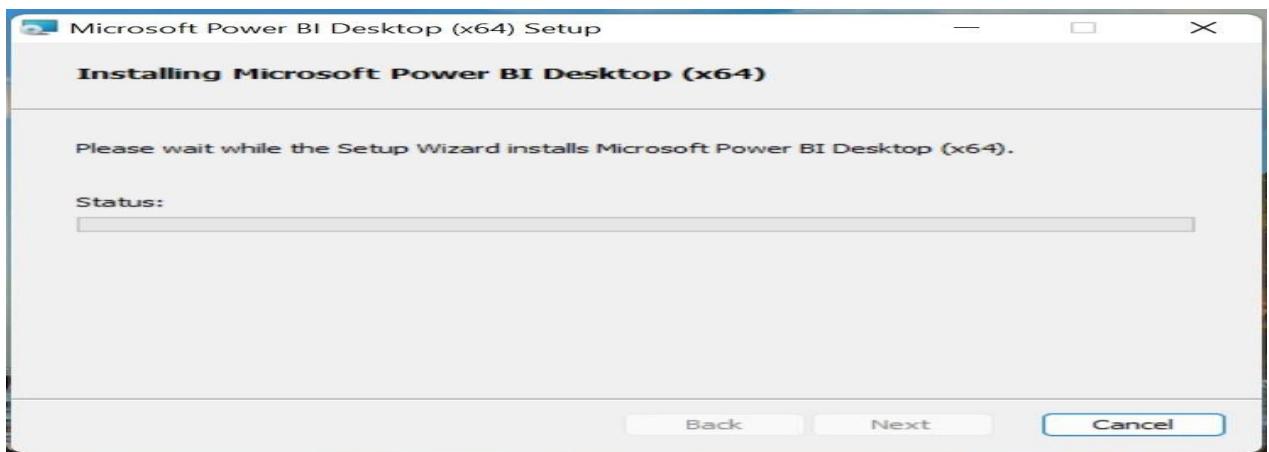
- Check the box for creating the desktop shortcut for easy access and then click install.

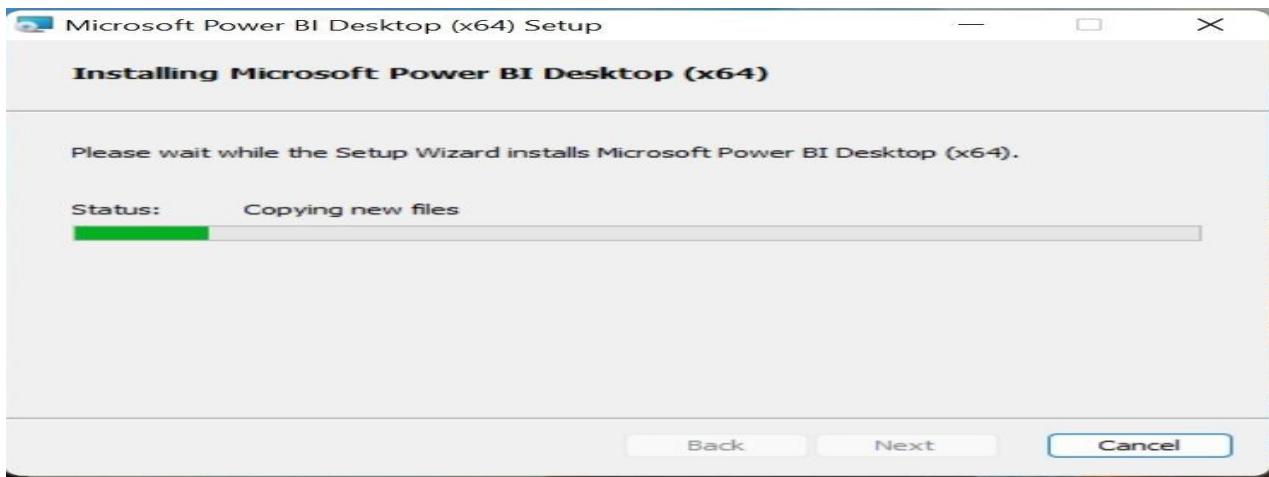


- Click on Yes to allow app to change in your device and choose the path where to install.

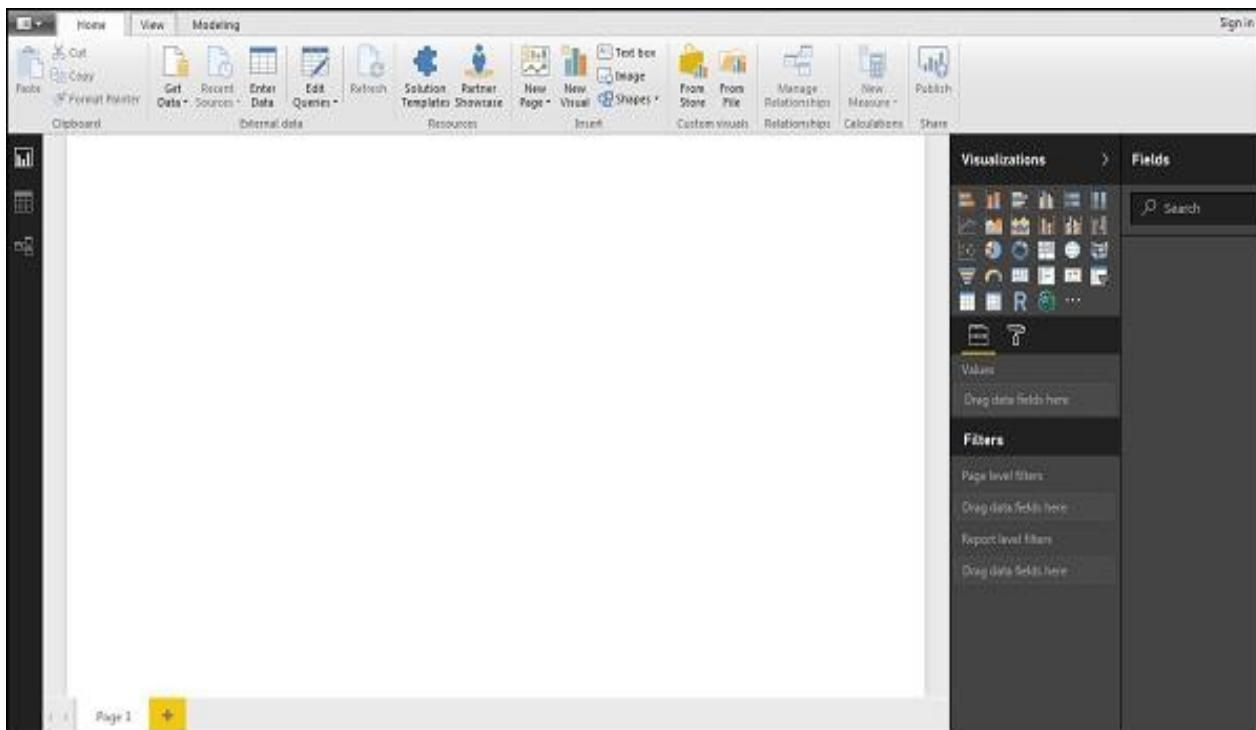


- Follow the status bar until the installation.





- When Power BI is installed, it launches a welcome screen. This screen is used to launch different options related to get data, enrich the existing data models, create reports as well as publish and share reports.



Experiment Number: 02

Aim:

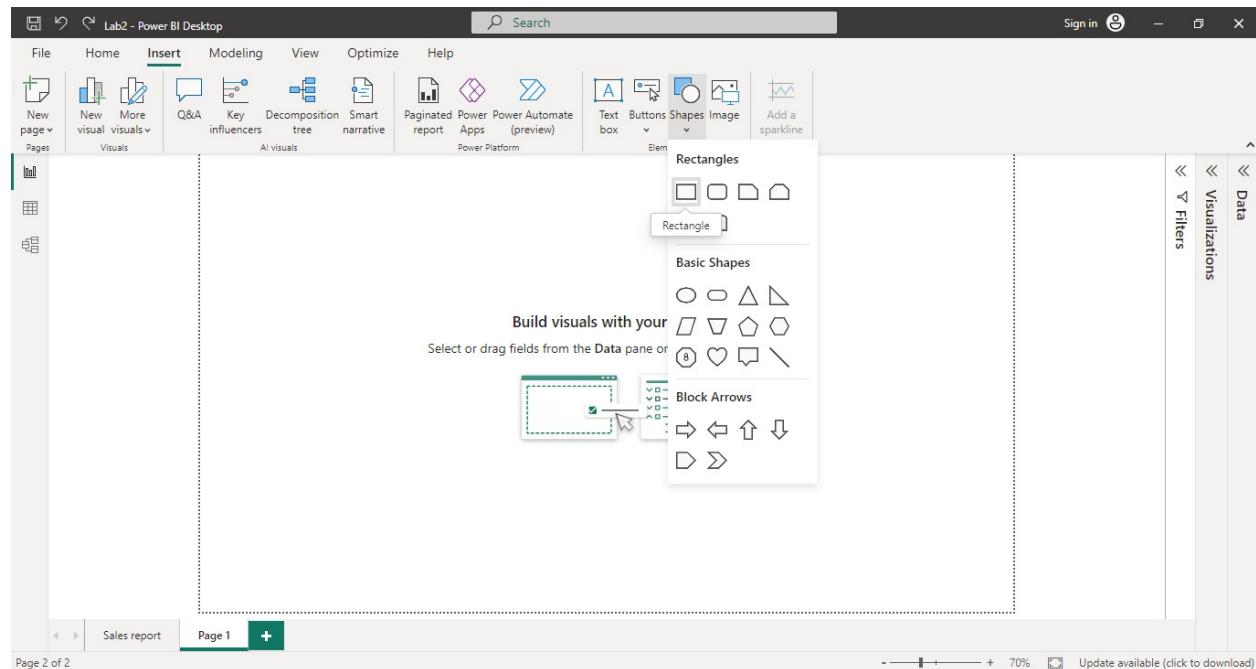
Import the data from different sources such as (Excel, SqlServer, Oracle etc.) and load in the target system.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Insert Rectangle Shape:



- Click on “Format tab” on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = “Sales report” , Font Size = 46, Horizontal Alignment = “Center”.

Output:

Sales report

3. Add Card with Current Date:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the context menu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the current date:

CurrentDate = Now()

- Press Enter to apply the formula.
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6
- Visualization > Format Visual >Visual > Category Label > Font Size = 12

Output:



7/12/2023 11:23:00 AM

Time

4. Create Stacked Bar Chart:

- Visualizations >Build Visuals >Fields > Y –Axis ="Category"
- Visualizations >Build Visuals >Fields > X-Axis ="Sales"
- Visualizations >Format Visuals> Y-axis> Values >Color = #6B2328
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #E66C37
- Visualizations >Format Visuals> Y-axis> Values >Color = #6B2328
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #E66C37
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Bar> Technology > Color = #A1343C
- Visualizations >Format Visuals> Bar> Furniture > Color = #6D5A00
- Visualizations >Format Visuals> Bar> Office Supplies> Color = #09124F
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 18
- Visualizations >Format Visuals> Title> Text ="Sale by Category"
- Visualizations >Format Visuals> Title> Font Size =25
- Visualizations >Format Visuals> Effects> Background Color = #E6E6E6

Output:



5. Create a Card to display Sum of Sales:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Drag "Sales" to "Fields".
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6
- Visualization > Format Visual >Visual > Category Label > Font Size = 24

Output:

Sum of Sales
2,326,534

6. Create a Card to display Total Orders:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Drag "OrderID" to "Fields" and change it to count orders.
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6
- Visualization > Format Visual >Visual > Category Label > Font Size = 24

Output:

Total Orders
5,111

7. Create a Card to display Total Orders:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Drag "Profit" to "Fields".
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6
- Visualization > Format Visual >Visual > Category Label > Font Size = 24

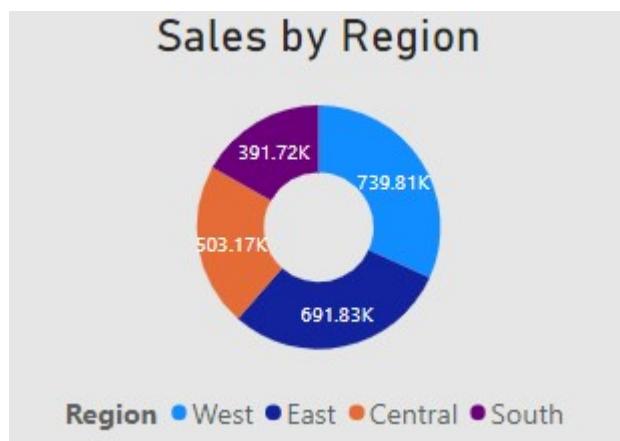
Output:



8. Create Donut Chart:

- Drag "Regions" to Legend , "Sum of Sales" to Values.
- Visualizations > Build Visual > Legend > option ="Bottom Center"
- Visualizations > Build Visual > Legend > Text>Font =12
- Visualizations > Build Visual > Detail Labels >Position ="Center"
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14

Output:

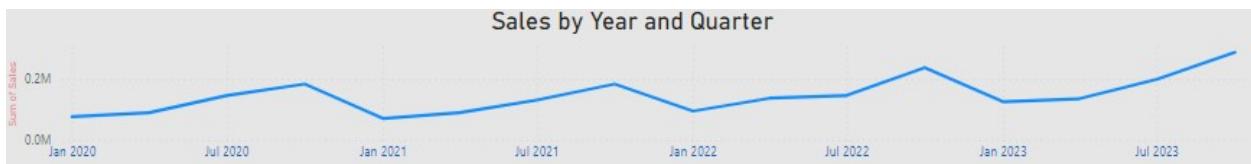


9. Create a Line Chart:

- Visualizations > Build Visual > X-axis ="Order Date" by Year, Quarter
- Visualizations > Build Visual > Y-axis ="Sum of Sales"
- Visualizations > Format Visual > Visual > X-axis > Color = #0D6ABF

- Visualizations > Format Visual > Visual > Y-axis > Color = #0D6ABF
- Visualizations > Format Visual > General > Title > Text > Font > 20
- Visualization >Format Visual > General > Effects > Background Color : #E6E6E6

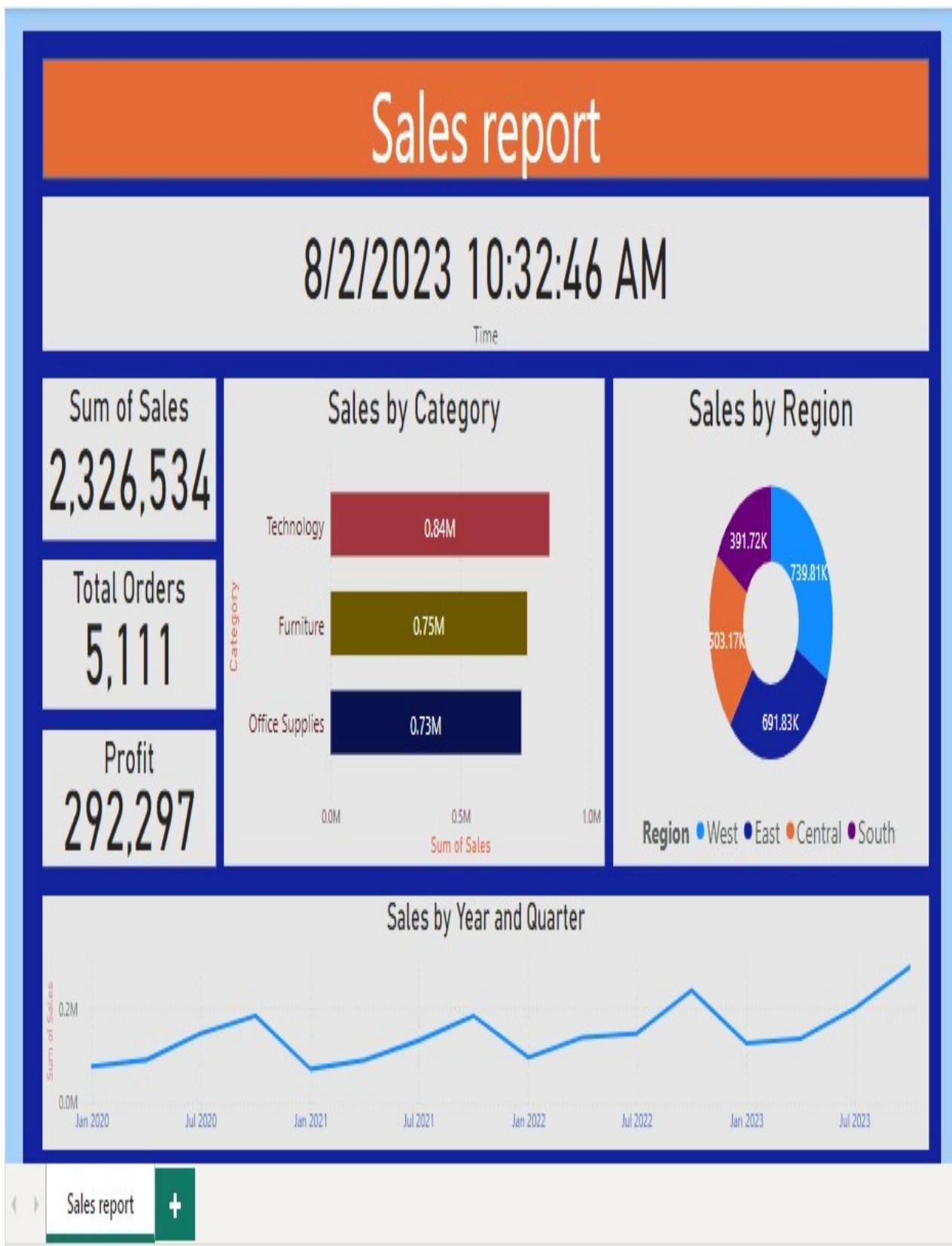
Output:



10. Final Visual Format:

- Visualizations > Page Information > Name ="Sales report"
- Visualizations > Canvas Background > color = #12239E
- Visualizations > WallPaper > Color = #A0D1FF

Output:



Experiment Number: 03

Aim:

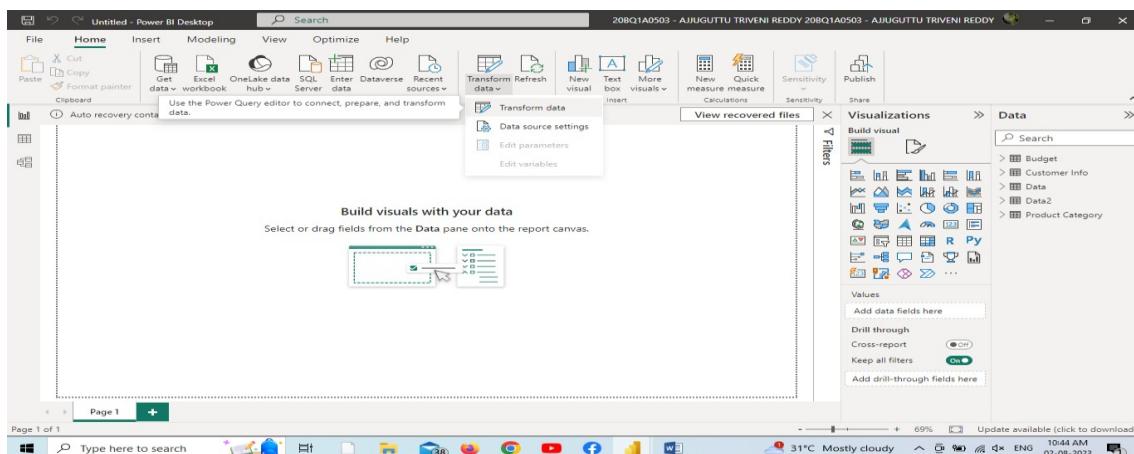
Perform the Extraction Transformation and Loading (ETL) on Data and build Relationship between Tables.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Transform the Data:



- Home > queries > Transform Data

Output:

A screenshot of the Power Query Editor. The ribbon at the top includes File, Home, Transform, Add Column, View, Tools, and Help. The 'Transform' tab is selected. The main area shows a table with six columns labeled 'Column1' through 'Column6'. A tooltip above the table says '= Table.TransformColumnTypes(Budget_Sheet,{{"Column1", type text}, {"Column2", type any}, {"Column3", type any}, {"Column4", type any}, {"Column5", type any}, {"Column6", type any}})'. On the left, there's a 'Queries [5]' pane listing 'Budget', 'Customer Info', 'Data', 'Data2', and 'Product Category'. On the right, there are sections for 'Query Settings', 'PROPERTIES' (with 'Name: Budget'), and 'APPLIED STEPS' (listing 'Source', 'Navigation', and 'Changed Type').

3. Use First Row as Headers:

- Select the First row of the table.
- Home > Transform > Use First Row as Headers.

The screenshot shows the Power Query Editor interface. A table with five columns and four rows of data is displayed. The first row is highlighted in blue, indicating it is selected. The columns are labeled 'Column1', 'Column2', 'Column3', 'Column4', and 'Column5'. The data rows show locations and their corresponding dates. To the right of the table, the 'Query Settings' pane is open, showing the name 'Budget'. The 'Applied Steps' pane is also visible, listing the step 'Changed Type'.

Output:

The screenshot shows the Power Query Editor interface after applying the 'Promoted Headers' step. The table now has a single column labeled 'Location' containing the values 'Chennai', 'Bangalore', and 'Hyderabad'. The original column headers 'Column1' through 'Column5' are now empty. The 'Query Settings' pane shows the name 'Budget'. The 'Applied Steps' pane lists the steps 'Source', 'Navigation', 'Changed Type', and 'Promoted Headers'.

4. Replace Values:

- Select one of the column from table in which we replace values.
- Home > Transform > Replace Values
- Replace the values by giving Existed value and the new text that need to get replaced in the **Value to Find** and **Replace with** textboxes.

The screenshot shows the Power Query Editor interface with the 'Replace Values' dialog box open. The dialog box allows replacing values in selected columns. The 'Value To Find' field contains 'Hyderabad' and the 'Replace With' field contains 'Pune'. The 'Applied Steps' pane shows the step 'Promoted Headers'.

Output:

The screenshot shows the Power Query Editor interface. On the left, there's a tree view of queries: Budget, Customer Info, Data, Data2, Product Category, Sheet1, Student Courses, Course, and Student. The main area displays a table with the following data:

	Date	Chennai	Bangalore	Pune	Total
1	01-01-2018	100000	120000	125000	100000
2	01-02-2018	100000	120000	125000	100000
3	01-03-2018	100000	120000	125000	100000
4	01-04-2018	100000	120000	125000	100000

The 'Applied Steps' pane on the right shows the step 'Replacer.ReplaceText({"Location"})'.

5. Manage Columns:

- Home > Manage Columns > Choose Columns > Select the checkboxes of required columns
- Home > Manage Columns > Go to column > Select the req Column checkbox to go that column

The screenshot shows the Power Query Editor interface. The main area displays a table with the following data:

Sale date	Receipt no.	Order type name	Item name	Category name	Selling price
06-03-2020	BL11	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL11	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL12	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL13	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL13	On Shop	Jeans - Levi's	Casual Wear	
06-03-2020	BL13	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL13	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL13	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL14	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL14	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL14	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL14	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL14	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL15	Online Order	Jeans - Denim	Casual Wear	
06-03-2020	BL15	Online Order	Jeans - Levi's	Casual Wear	
06-03-2020	BL15	Online Order	Jeans - Levi's	Casual Wear	
06-03-2020	BL16	On Shop	Jeans - Denim	Casual Wear	
06-03-2020	BL16	On Shop	Jeans - Denim	Casual Wear	
06-03-2020	BL16	On Shop	Jeans - Zara	Casual Wear	
06-03-2020	LNS	On Shop	Jeans - Levi's	Casual Wear	

The 'Applied Steps' pane on the right shows the step 'Promoted Headers'.

Output:

The screenshot shows the Power Query Editor interface. The main area displays a table with the following data:

Sale date	Receipt no.	Selling price	Item quantity
06-03-2020	BL11	11000	1
06-03-2020	BL11	11000	2
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL12	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	2
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL13	11000	1
06-03-2020	BL14	11000	1
06-03-2020	BL14	11000	1
06-03-2020	BL14	11000	1
06-03-2020	BL14	11000	1
06-03-2020	BL14	11000	1
06-03-2020	BL15	11000	1
06-03-2020	BL15	11000	1
06-03-2020	BL15	11000	1
06-03-2020	BL16	9000	1
06-03-2020	BL16	9000	1
06-03-2020	LNS	11000	1

The 'Applied Steps' pane on the right shows the step 'Removed Other Columns'.

6. Reduce Rows:

- Home > Keep Rows > keep top rows > Specify num of rows(Fig1)
- Similarly, keep bottom rows, keep range of rows are done
- Home > Remove Rows > Remove bottom rows > specify num of rows to be removed from bottom(Fig2)
- Similarly, Remove top rows, remove alternate rows can be done.

Output:

The first screenshot shows a table with 10 rows and the formula `= Table.FirstN(#"Removed Other Columns",10)`. The applied steps list includes "Kept First Rows".

	Sale date	Receipt no	Selling price	Item quantity
1	06-03-2020	BL11	1100	1
2	06-03-2020	BL11	1100	1
3	06-03-2020	BL12	1100	1
4	06-03-2020	BL12	1100	1
5	06-03-2020	BL12	1100	1
6	06-03-2020	BL12	1100	1
7	06-03-2020	BL12	1100	2
8	06-03-2020	BL13	1100	1
9	06-03-2020	BL13	1100	1
10	06-03-2020	BL13	900	1

The second screenshot shows a table with 7 rows and the formula `= Table.RemoveLastN(#"Kept First Rows",3)`. The applied steps list includes "Removed Bottom Rows".

	Sale date	Receipt no	Selling price	Item quantity
1	06-03-2020	BL11	1100	1
2	06-03-2020	BL11	1100	1
3	06-03-2020	BL12	1100	1
4	06-03-2020	BL12	1100	1
5	06-03-2020	BL12	1100	1
6	06-03-2020	BL12	1100	1
7	06-03-2020	BL12	1100	2

7. Split Column:

The screenshot shows the Power Query Editor with the "Data Type" context menu open over the "Selling price" column. The menu options include "Split Column", "Group By", "Advanced Editor", "Choose Columns", "Remove Columns", "Keep Rows", "Remove Rows", "Reduce Rows", and "Sort".

The main area displays a table with columns: Sale date, Receipt no, Order type name, Item name, and Selling price. The "Selling price" column contains values like "On Shop", "Jeans - Levi's", "Casual Wear", etc.

The properties pane on the right shows the query is named "Data" and the applied steps list includes "Changed Type1".

Output:

- Split Column By Delimiter

A screenshot of the Power Query Editor interface. The main area shows a table with the following columns: Sale date, Receipt no., Order type name, Item name.1, Item name.2, and Category no. The data consists of 24 rows of purchase records. The 'Applied Steps' pane on the right shows the step 'Split Column by Delimiter' has been applied.

- Split Column By Number of Characters

A screenshot of the Power Query Editor interface. The main area shows a table with the following columns: Sale date, Receipt no., Order type name.1, Order type name.2, Item name, and Category no. The data consists of 24 rows. The 'Applied Steps' pane shows the step 'Changed Type1' has been applied.

- Split Column By Positions

A screenshot of the Power Query Editor interface. The main area shows a table with the following columns: Sale date, Receipt no.1, Receipt no.2, Order type name, Item name, and Category no. The data consists of 24 rows. The 'Applied Steps' pane shows the step 'Changed Type1' has been applied.

- Similarly, Split Column By Uppercase to Lowercase, Split Column By Lowercase to Uppercase, Split Column By Digit to non-digit, Split column by non-digit to digit can be done.

8. Sort:

- Home > Sort > Sort Descending (Sort Highest to Lowest)

If we want to sort from lowest to highest then select Sort Ascending.

Output:

The screenshot shows the Power Query Editor interface with a table of data. The table has columns: Sale date, Receipt no., Ordertype name, Item name, Category name, and Selling price. The rows are numbered 1 to 15. The 'Ordertype name' column is highlighted. The status bar at the bottom right indicates 'Sorted Rows'. The 'APPLIED STEPS' pane on the right shows the step 'Kept First Rows'.

9. Group By:

- Home > Group By > Specify the column to Group By > Give the new column name and Operation to get the desired output.

Output:

	Ordertype name	Count
1	On Shop	973
2	Online Order	63
3	null	1

10. Create table:

- Home > Enter data > Create table by giving values to the columns

Snowflake

Create Table

	SID	SName
1	1	Shiv
2	2	Ram
3	3	Mahi
4	4	Sakshi
5	5	Kritika

Name: Student

OK Cancel

Output:

Power Query Editor

File Home Transform Add Column View Tools Help

Queries [5]

- Budget
- Customer Info
- Data
- Data2
- Product Category
- Sheet1
- Student Courses
- Course
- Student

TransformData - Power Query Editor

Source: Student

Properties: Name: Student

Applied Steps: Changed Type

Query Settings: Name: Student

Transform Step: = Table.TransformColumnTypes(Source,{{"SID", Int64.Type}, {"SName", type text}})

SID	SName
1	Shiv
2	Ram
3	Mahi
4	Sakshi
5	Kritika

11. Merge Queries:

- Home > Merge Queries > Select a table and matching columns to create a merging table

Power Query Editor

Add Column View Tools Help

Inter Data Data source settings Manage Parameters Refresh Advanced Editor Properties Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Replace Values Data Type: Whole Number Use First Row as Headers Transform

Merge Queries Text Analytics

Merge Queries as New Merge Queries in Machine Learning

Merge Queries as New Merge Queries in Machine Learning

Combine Files AI Insights

Query Settings Name: Student Courses

Properties Name: Student Courses

Applied Steps Source: Changed Type Renamed Columns

Query Settings Name: Student Courses

Transform Step: = Table.RenameColumns(#"Changed Type",{{"Column1", "CourseID"}})

SID	CourseID
1	10
2	20
3	20
4	50
5	40

Output:

Power Query Editor

Add Column View Tools Help

Inter Data Data source settings Manage Parameters Refresh Advanced Editor Properties Choose Columns Remove Columns Keep Rows Remove Rows Sort Split Column Group By Replace Values Data Type: Whole Number Use First Row as Headers Transform

Merge Queries Text Analytics

Merge Queries as New Merge Queries in Machine Learning

Merge Queries as New Merge Queries in Machine Learning

Combine Files AI Insights

Query Settings Name: Student Courses

Properties Name: Student Courses

Applied Steps Source: Changed Type Renamed Columns Merged Queries Expanded Student

Query Settings Name: Student Courses

Transform Step: = Table.ExpandTableColumn(#"Merged Queries", "Student", {"SID", "SName"}, {"Student.SID", "Student.SName"})

SID	CourseID	Student.SID	Student.SName
1	1	1	Shiv
2	1	1	Shiv
3	2	2	Ram
4	3	3	Mahi
5	3	3	Mahi

12. Replacing Null values By Fill down or Fill up:

- Select a Column > Right Click > Select Fill option > Select Down

The screenshot shows the Power Query Editor interface. A table is open with two columns: Column1 and Column2. Column1 contains several null entries. The formula bar at the top shows the formula: = Table.TransformColumnTypes(#"Changed Type", {"Column1", type text}, {"Column2", type text}). The 'APPLIED STEPS' pane on the right shows a step named 'Changed Type'. The table data is as follows:

Category name	Item name
Casual Wear	Jeans - Levi's
null	Jeans - Denim
null	Jeans - Zara
null	Jeans - Lega
Semi Formal	Shirt - PE
null	Legin
null	T-shirt
Formal	shirt
null	Shirt Louis
null	Indian Terrain
null	Shirt - Arrow
Accessories	Wallet
null	Chain

Output:

The screenshot shows the Power Query Editor interface with the same table. The null values in Column1 have been filled down with the previous non-null value. The table data is now:

Category name	Item name
Casual Wear	Jeans - Levi's
Casual Wear	Jeans - Denim
Casual Wear	Jeans - Zara
Casual Wear	Jeans - Lega
Semi Formal	Shirt - PE
Semi Formal	Legin
Semi Formal	T-shirt
Formal	shirt
Formal	Shirt Louis
Formal	Indian Terrain
Formal	Shirt - Arrow
Accessories	Wallet
Accessories	Chain

13. Append Queries:

- Home > Append Queries > Select table to append
- Concatenate rows from two tables into a single table.

The screenshot shows the Power Query Editor interface with two tables side-by-side. The first table has columns SID and SName. The second table also has columns SID and SName. Both tables have identical data. The formula bar at the top shows the formula: = Table.TransformColumnTypes(Source, {"SID", type number}, {"SName", type text}). The table data is as follows:

SID	SName
1	Shiv
2	Ram
3	Mahi
4	Sakshi
5	Kritika

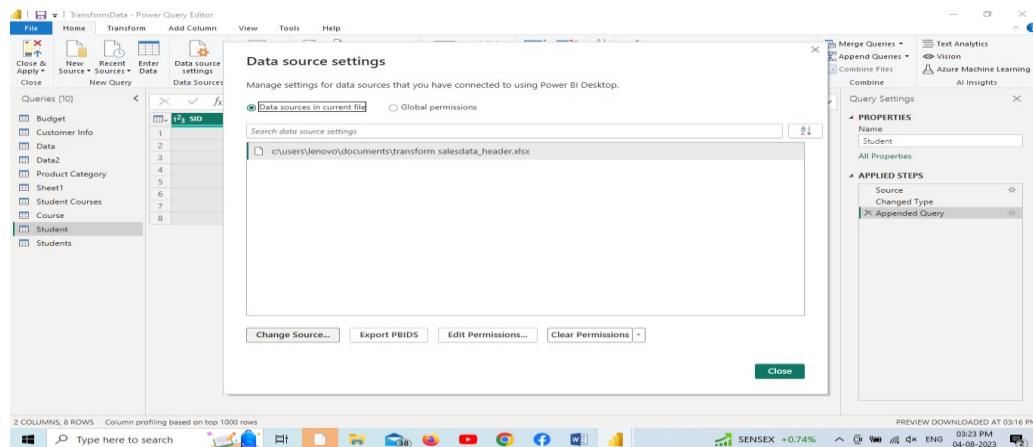
Output:

The screenshot shows the Power Query Editor interface. On the left, there is a preview pane displaying a table with two columns: SID and SName. The data consists of 8 rows with values: 1 Shiv, 2 Ram, 3 Mahi, 4 Sakshi, 5 Kritika, 6 Anushka, 7 Sweety, and 8 Shetty. On the right, the 'Query Settings' pane is open, showing the 'PROPERTIES' section with 'Name' set to 'Student' and the 'APPLIED STEPS' section which includes 'Source', 'Changed Type', and 'Appended Query'.

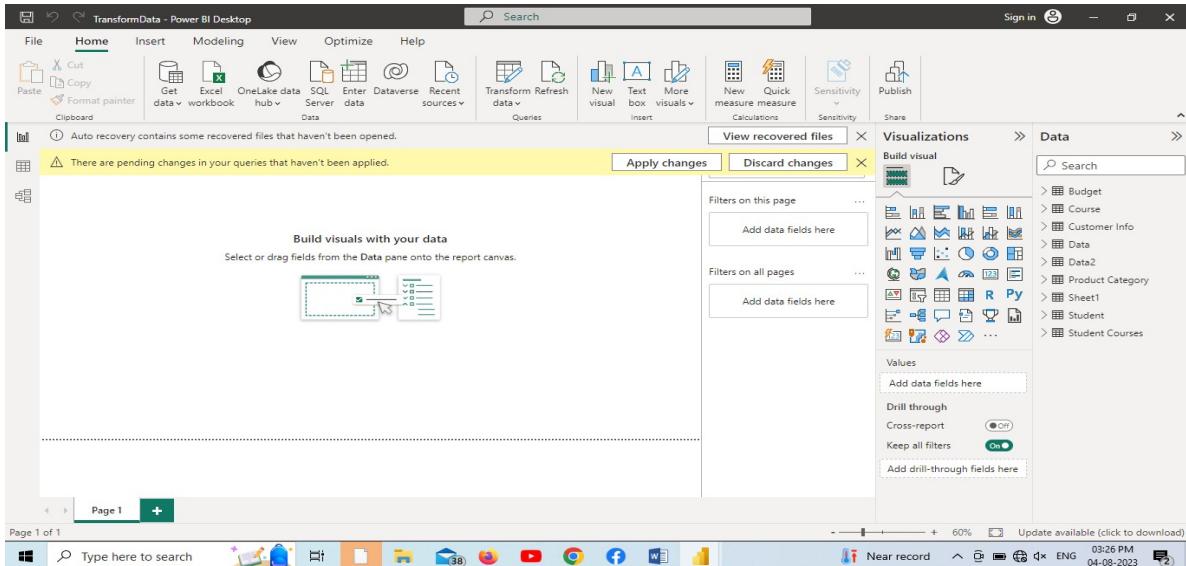
SID	SName
1	Shiv
2	Ram
3	Mahi
4	Sakshi
5	Kritika
6	Anushka
7	Sweety
8	Shetty

14. Data source Settings:

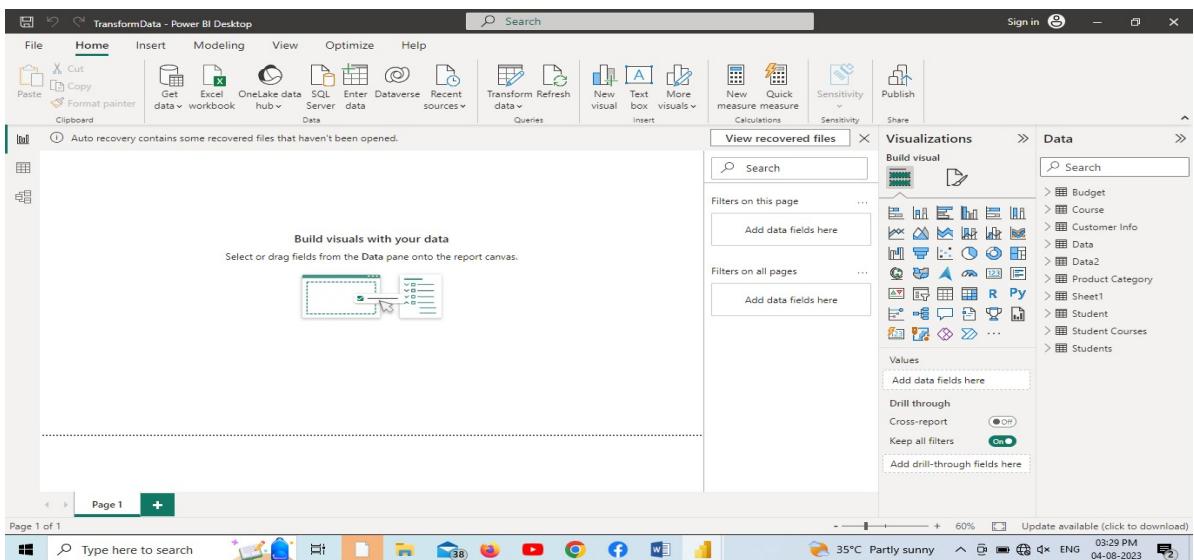
- Home > Data Source Settings > Change the path or loc of data (if needed).



- Open the power Bi desktop and Apply changes



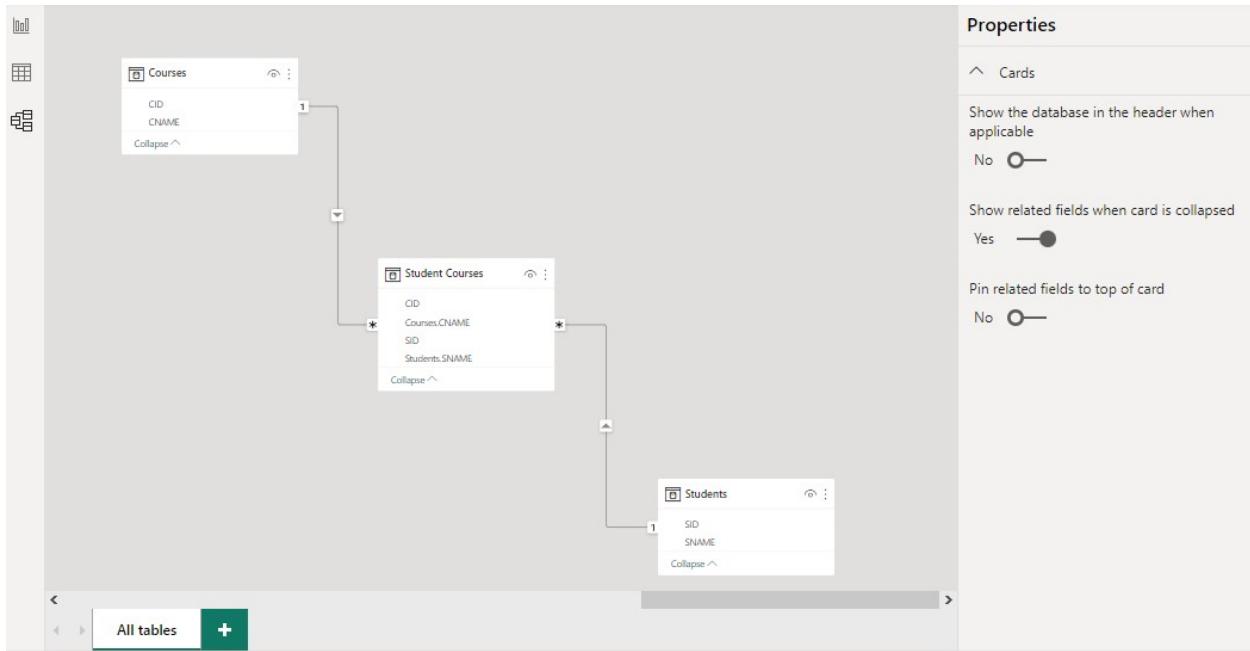
Output:



15. Relationships between tables:

- Select Model View at left vertical tab.
- Create table relations with correlations with them.

Output:



Experiment Number: 04

Aim:

Create different Advanced visualization in a report.

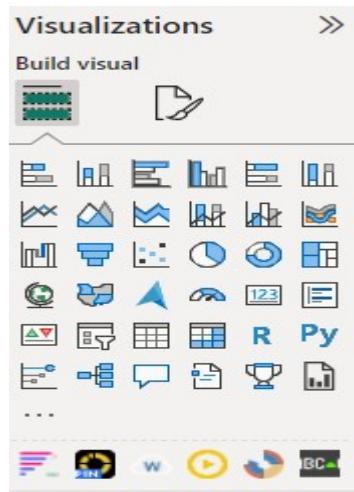
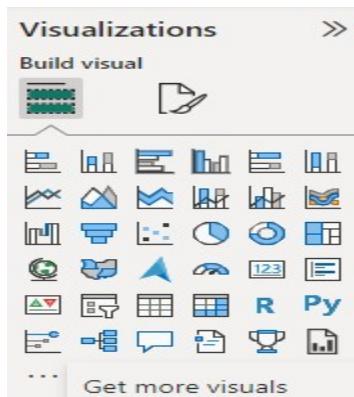
Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Importing Advance Visuals:

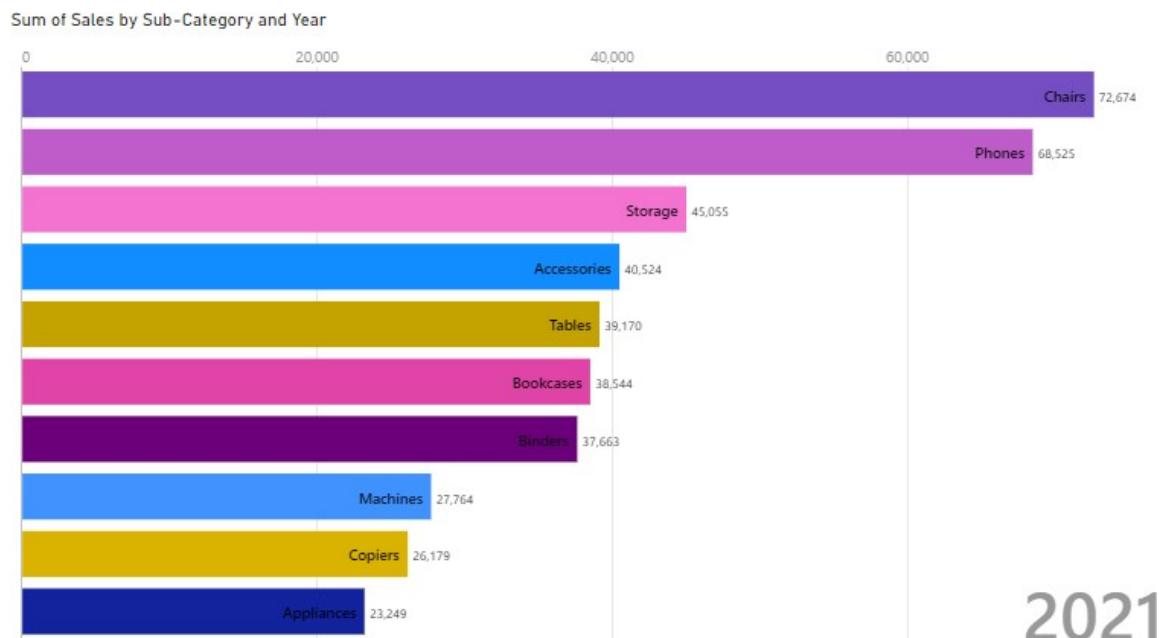
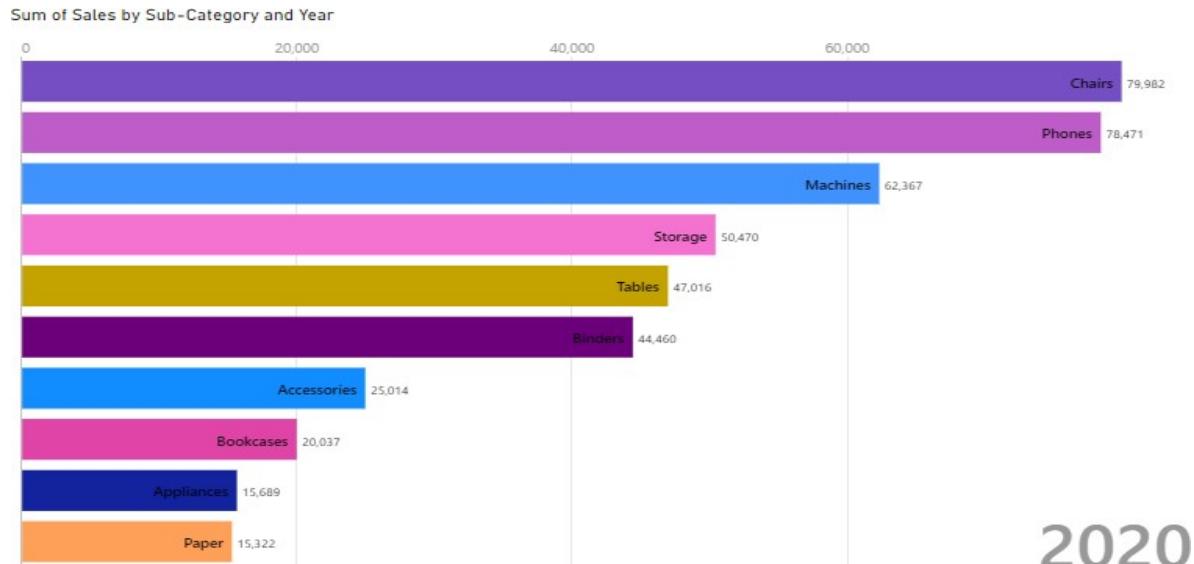
- To install them, first log in to the application
- Visualization > get more visuals > search for visuals > Click on ADD
- Add all mentioned visuals to the application i.e., Animated Bar Chart, Drill Down Donut Pro, Play Axis, WordCloud, SunBurst, Scroller



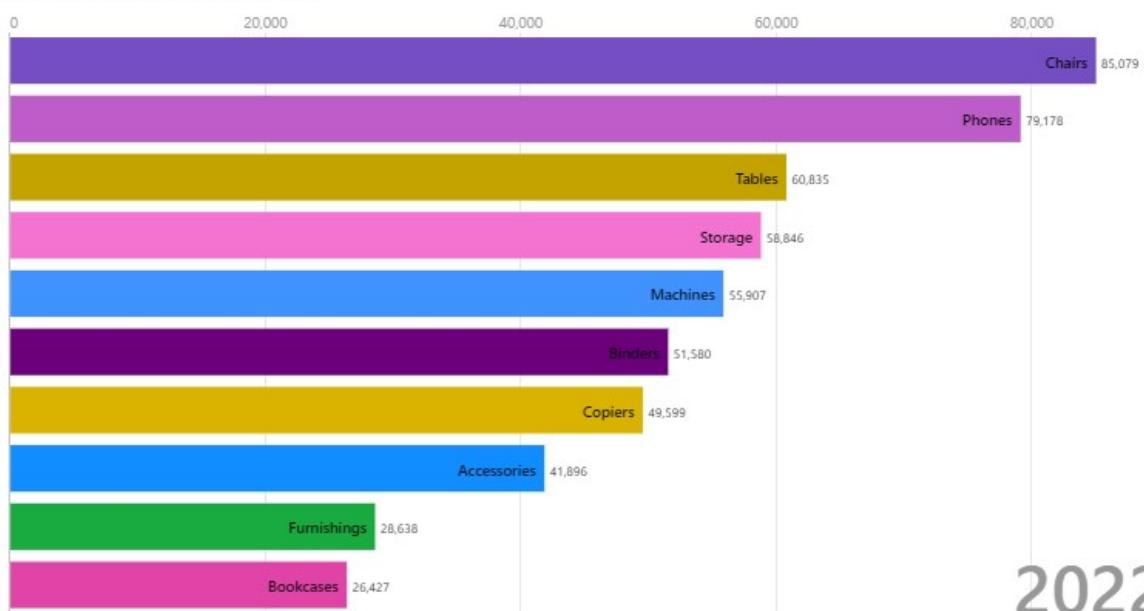
3. Creating Animated Bar Chart:

- Visualizations > Build Visual > Animated Bar Chart
- Visualizations > Build Visual > Name = "Sub Category"
- Visualizations > Build Visual > Value = "Sum of Sales"
- Visualizations > Build Visual > Period = "Order Date – Year"

Outputs per Year:

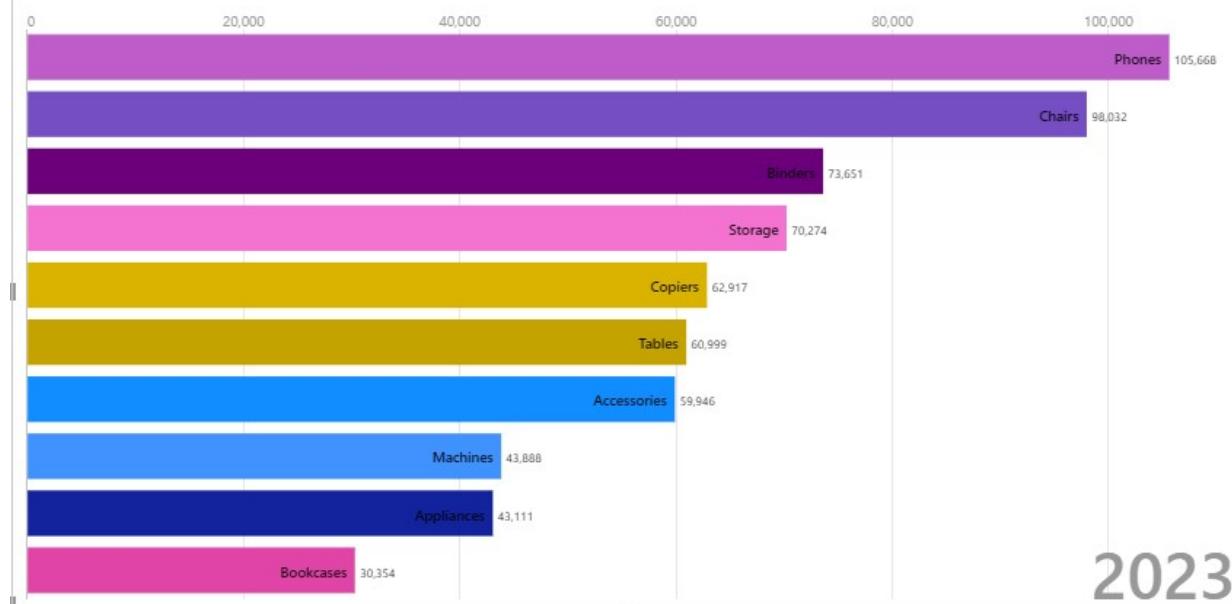


Sum of Sales by Sub-Category and Year



2022

Sum of Sales by Sub-Category and Year



2023

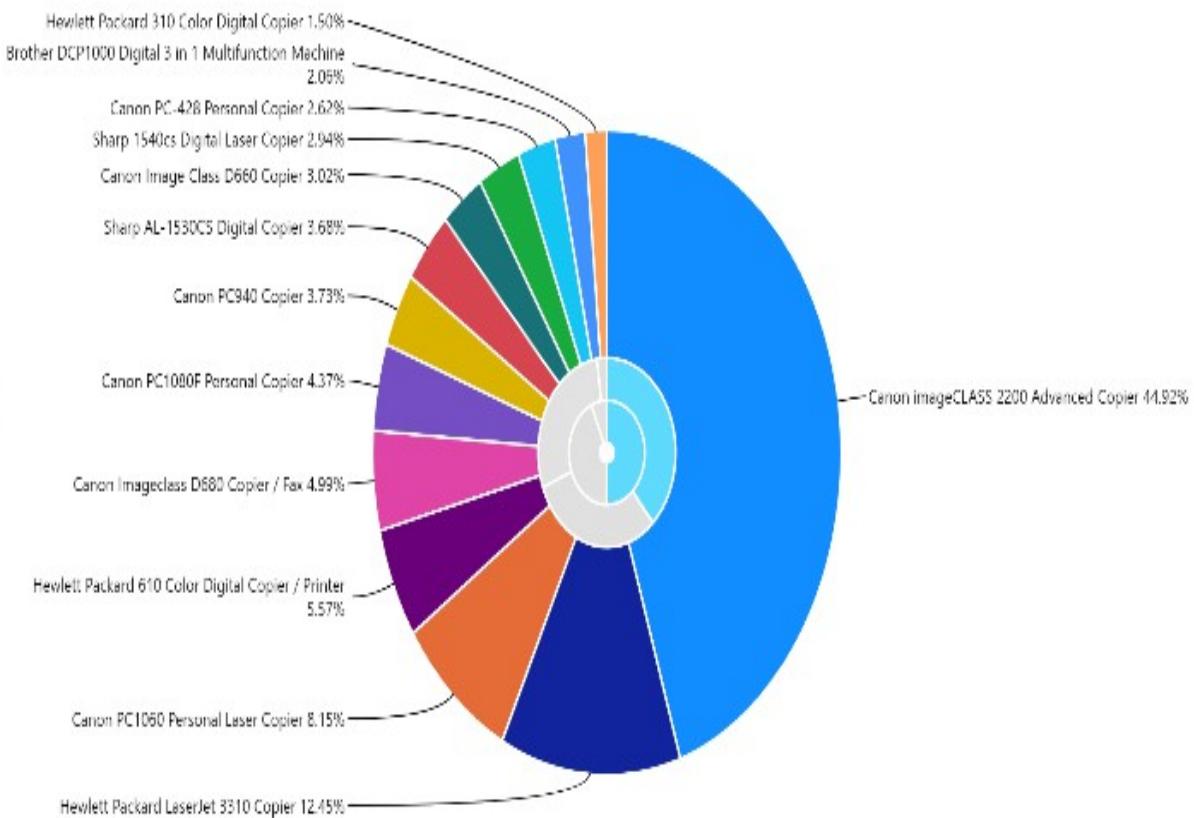
3. Creating Animated Bar Chart:

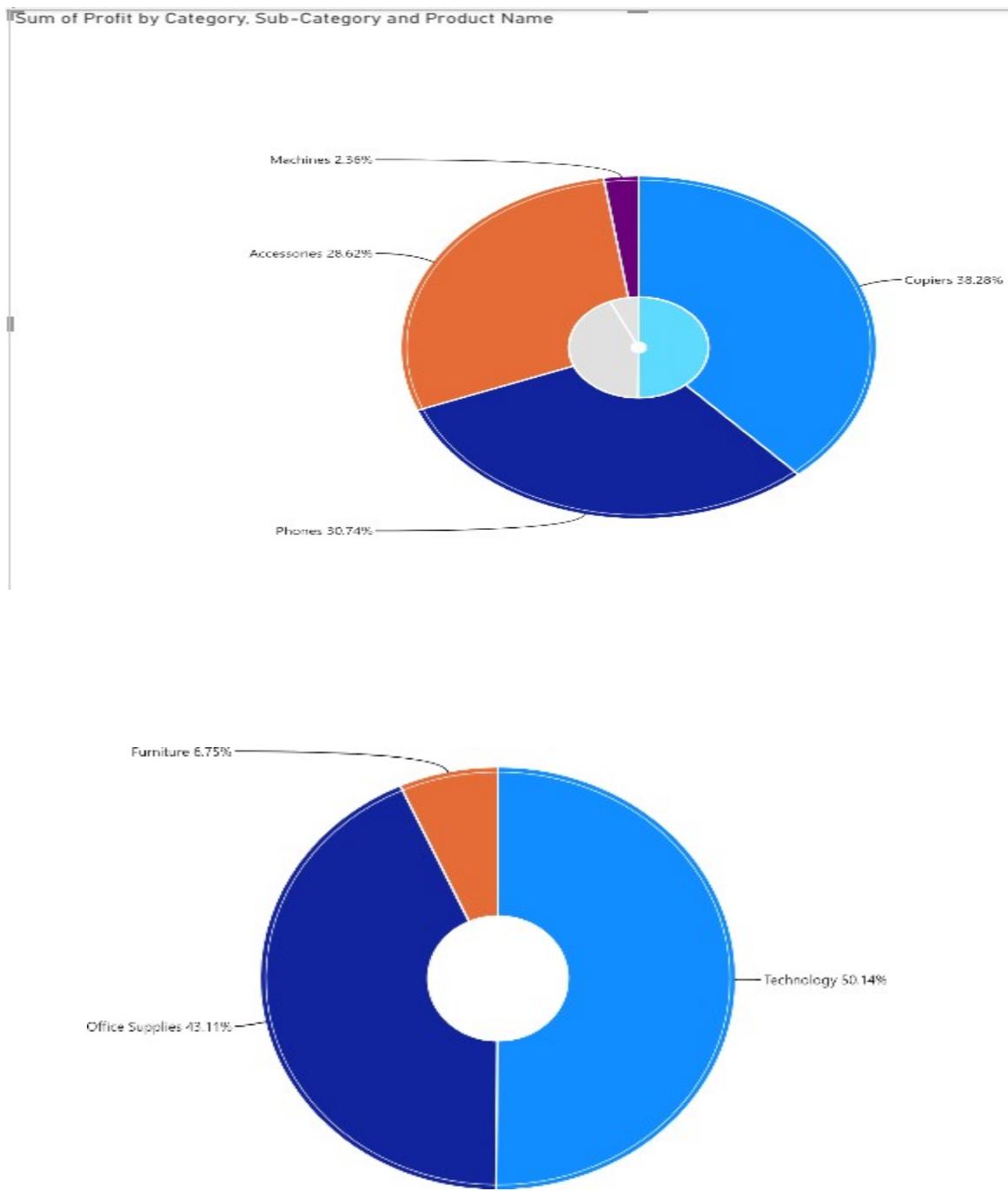
- Visualizations > Build Visual > Drill Down Donut Pro
- Visualizations > Build Visual > Category = “Category Hierarchy”
- Visualizations > Build Visual > Value = “Profit”
- Click on center to reverse to drill up and click on one part side to drill down.

Output:

Sum of Profit by Category, Sub-Category and Product Name

Y E ...
①





4. Creating Word Cloud:

- Visualizations > Build Visual > WordCloud
- Visualizations > Build Visual > Category = “State / Province”
- Visualizations > Build Visual > Value = “Sum of Profits”

➤ Click on Name of state to view its values.

Output:

Sum of Profit by State/Province



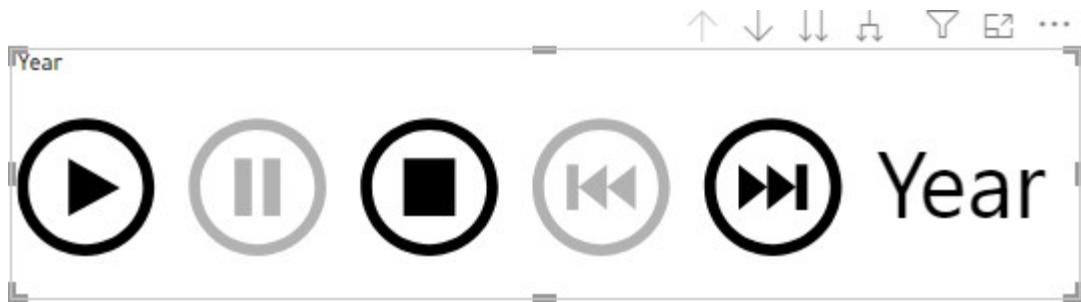
Sum of Profit by State/Province



5. Creating Play Axis:

- Visualizations > Build Visual > Play Axis
- Visualizations > Build Visual > Field= “Order Date”

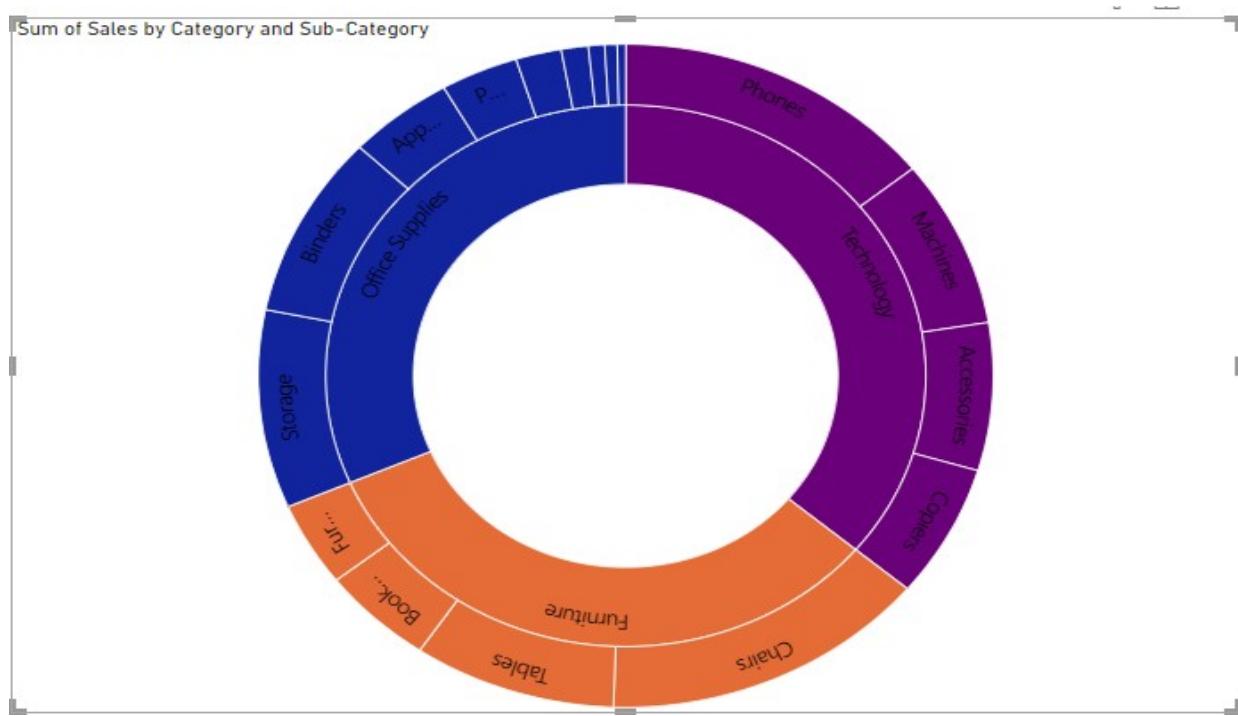
Output:

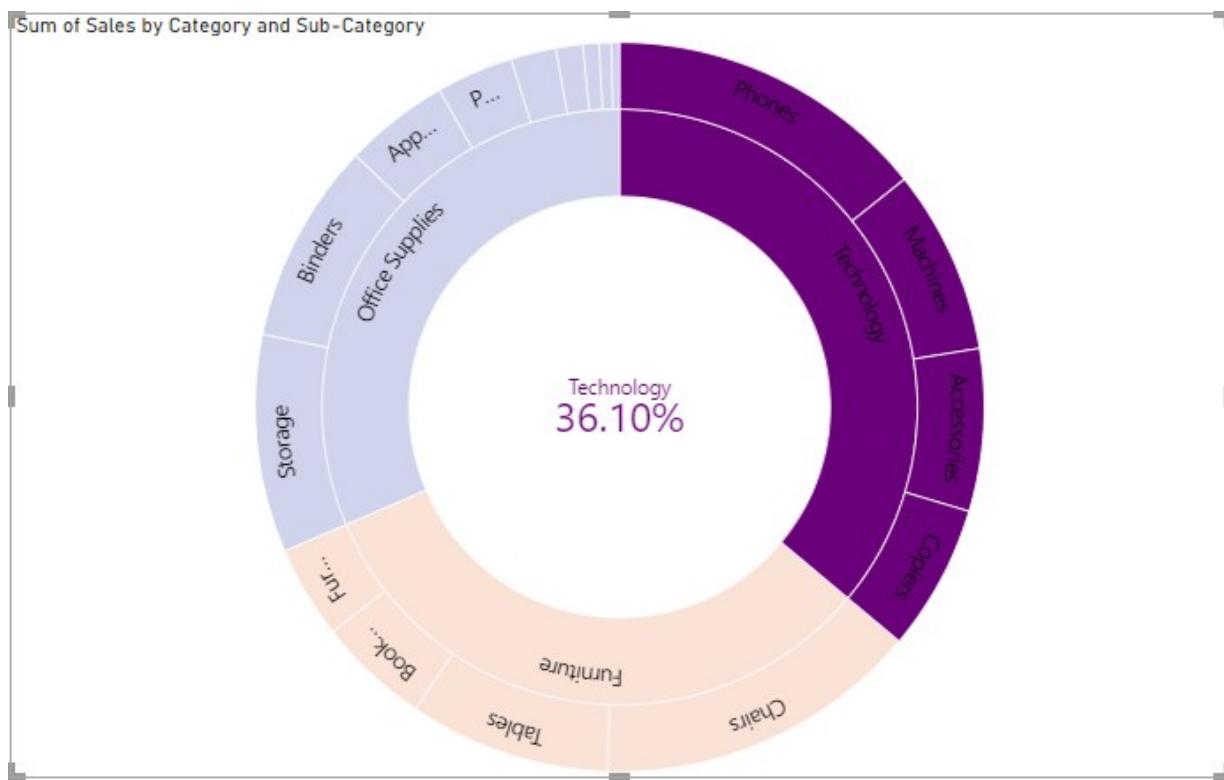


6. Creating Sun Burst:

- Visualizations > Build Visual > Sun Burst
- Visualizations > Build Visual > Groups= “Category, Sub Category”
- Visualizations > Build Visual > Values = “sum of sales”
- Drill down by selecting category name on the chart and drill up by click on it again.

Output:

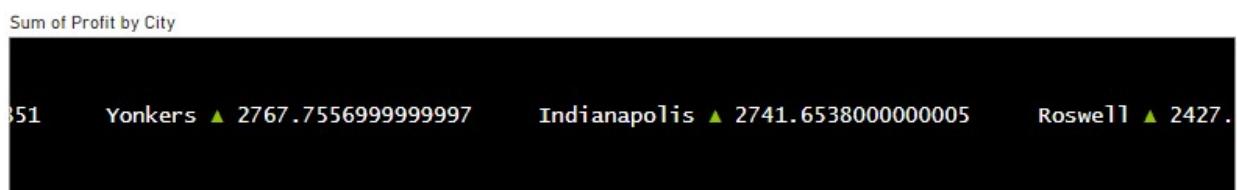




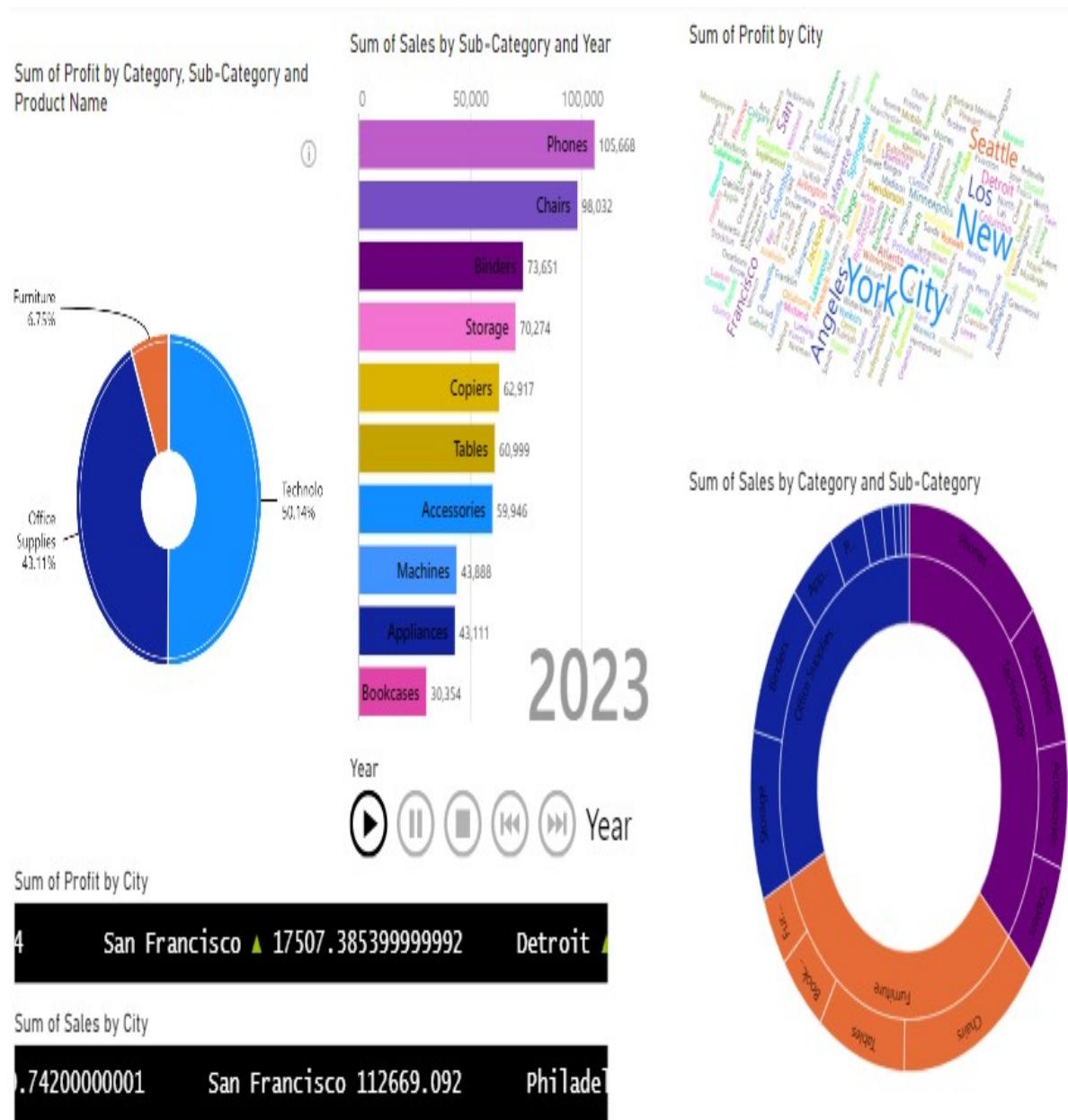
6. Creating Scroller:

- Visualizations > Build Visual > Scroller
- Visualizations > Build Visual > Category= “City”
- Visualizations > Build Visual > Measure = “sum of sales”
- Visualizations > Build Visual > Category= “City”
- Visualizations > Build Visual > Measure = “Sum of profits”

Output:



7. Final Report output:



Experiment Number: 05

Aim:

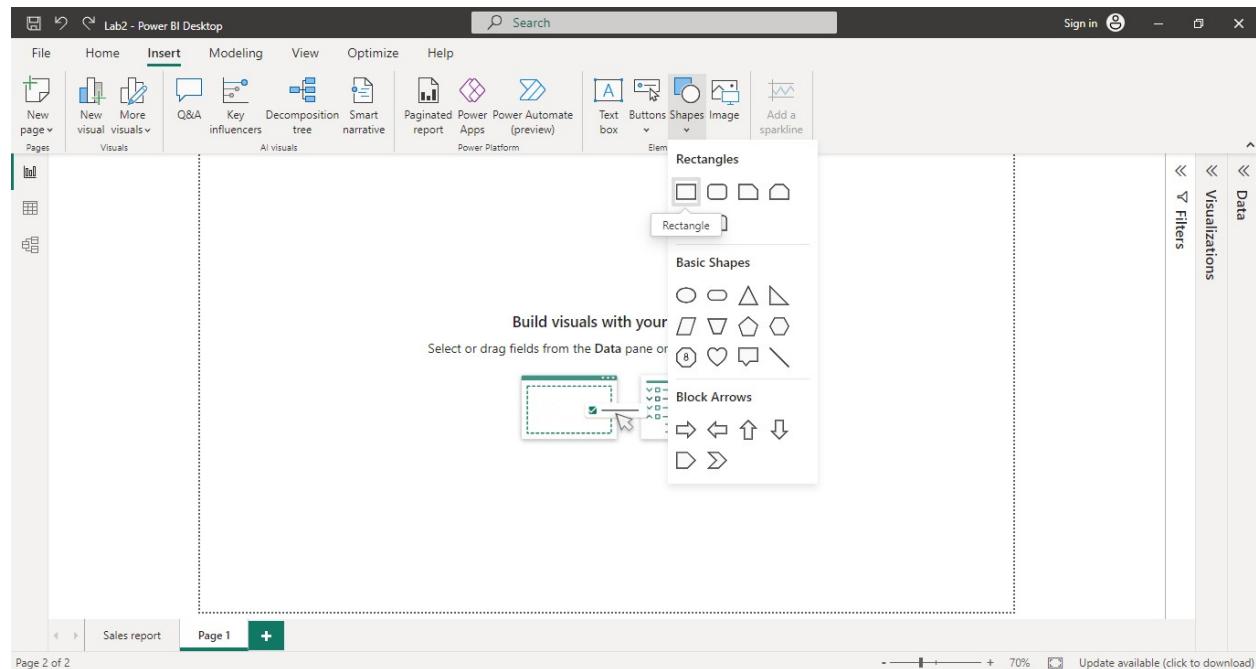
Create Reports Using set Interactions between Visuals, Hierarchies and Drilldown, Drill through into Power BI.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Insert Rectangle Shape:



- Click on "Format tab" on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = "Sales report" , Font Size = 46, Horizontal Alignment = "Center".

Output:

Sales report

3. Create a Slicer:

- Visualizations > Build Visual > Slicer
- Visualizations > Build Visual > Field = “Location”
- Visualizations >Format Visuals> Title> Font Size =14
- Visualizations >Format Visuals> Effects> Background Color = #9B0065
- Visualizations >Format Visuals> Effects> Height= 79
- Visualizations >Format Visuals> Effects> Width = 582

Output:



4. Add Card with Current Date:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the current date:
 - **CurrentDate = Now()**
- Press Enter to apply the formula.
- Visualization >Format Visual > General > Effects > Background Color : #F18F49
- Visualization > Format Visual >Visual > Category Label > Font Size = 12

Output:

02-08-2023 17:44:12

5. Create Stacked Bar Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”Category Name Hierarchy”
- Visualizations >Build Visuals >Fields > X-Axis =”Sum of Selling Price”
- Visualizations >Format Visuals> Y-axis> Values >Color = #5F6B6D
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Color = #5F6B6D
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #374649
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Bar> Accessories> Color = #374649
- Visualizations >Format Visuals> Bar> Formal>color = #D2B04C
- Visualizations >Format Visuals> Bar> SemiFormal> Color = #00ACFC
- Visualizations >Format Visuals> Bar> Casual Wear> Color = #C83D95
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 18
- Visualizations >Format Visuals> Title> Text =”Sum of selling Price By Category Name”
- Visualizations >Format Visuals> Title> Font Size =24
- Visualizations >Format Visuals> Effects> Background Color = #F1792

Output:

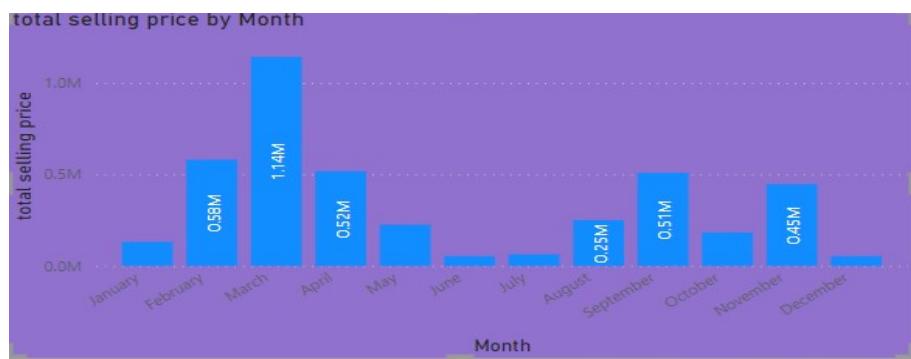


6. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”selling price”
- Visualizations >Build Visuals >Fields > X-Axis =”Month”
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5F6B6D

- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="total selling price by month"
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #5C2D91

Output:



7. Create a Card to display Selling Price:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the total selling price:
 - total selling price = `SUMX(Data,Data[Sales price]*Data[Item quantity])`
- Drag "Total Selling Price" to "Fields".
- Visualization >Format Visual > General > Effects > Background Color : #5B2D71
- Visualization > Format Visual >Visual > Category Label > Font Size = 20

Output:



8. Create a Card to display Total Item Count:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the

contextmenu. This will open the formula bar at the top.

- Drag “Total Item Count” to “Fields”.
- In the formula bar, enter the following formula to create a measure that calculates the total item count:
 - **total item count = countx(data,Data[Item quantity])**
- Visualization >Format Visual > General > Effects > Background Color : #AF916D
- Visualization > Format Visual >Visual > Category Label > Font Size = 20

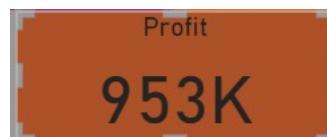
Output:



9. Create a Card to display Profit:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- Drag “profit” to “Fields”.
- In the formula bar, enter the following formula to create a measure that calculates the profit:
 - **profit = Data[total selling price]-[total cost price]**
- Visualization >Format Visual > General > Effects > Background Color :#5C0001
- Visualization > Format Visual >Visual > Category Label > Font Size = 20

Output:



10. Create a Card to display Profit %:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- Drag “profit %” to “Fields”.
- In the formula bar, enter the following formula to create a measure that calculates the profit%:
 - **%Profit = (Data[profit]/Data[total cost price])*100**
- Visualization >Format Visual > General > Effects > Background Color : #F8BCBD

- Visualization > Format Visual > Visual > Category Label > Font Size = 20

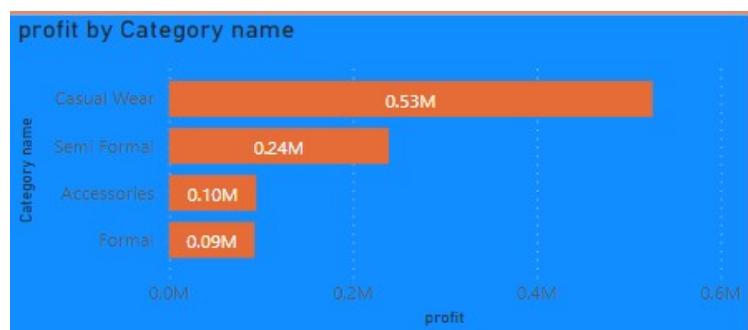
Output:



11. Create Stacked Bar Chart:

- Visualizations > Build Visuals > Fields > Y -Axis = "Category Name"
- Visualizations > Build Visuals > Fields > X-Axis = "Profit"
- Visualizations > Format Visuals > Y-axis > Values > Color = #5F6B6D
- Visualizations > Format Visuals > Y-axis > Values > Title > Color = #374649
- Visualizations > Format Visuals > X-axis > Values > Color = #5F6B6D
- Visualizations > Format Visuals > X-axis > Values > Title > Color = #374649
- Visualizations > Format Visuals > Bar > Show All
- Visualizations > Format Visuals > Bar > Accessories > Color = # F18F49
- Visualizations > Format Visuals > Bar > Formal > color = # F18F49
- Visualizations > Format Visuals > Bar > SemiFormal > Color = # F18F49
- Visualizations > Format Visuals > Bar > Casual Wear > Color = # F18F49
- Visualizations > Format Visuals > Data Labels > Options > Inside Center
- Visualizations > Format Visuals > Data Labels > Values > Font Size = 18
- Visualizations > Format Visuals > Title > Text = "Profit By Category Name"
- Visualizations > Format Visuals > Title > Font Size = 18
- Visualizations > Format Visuals > Effects > Background Color = #008cEEE

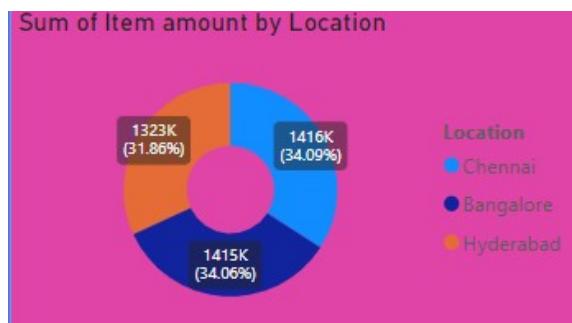
Output:



12. Create Donut Chart:

- Visualizations >Build Visuals >Fields > Legend="Location"
- Visualizations >Build Visuals >Fields > Values="Sum of Item Count"
- Visualizations >Format Visuals> Legend> slices >Color ="374649"
- Visualizations >Format Visuals> Values >Color = #5F6B6D
- Visualizations >Format Visuals> Legend> slices>Chennai >Color = #1DD5EE
- Visualizations >Format Visuals> Legend> slices>Bangalore >Color = #5C2D91
- Visualizations >Format Visuals> Legend> slices >Hyderabad>Color = #F18F49
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="Sum of Item amount by Location"
- Visualizations >Format Visuals> Title> Font Size =18
- Visualizations >Format Visuals> Effects> Background Color = #EF008C

Output:

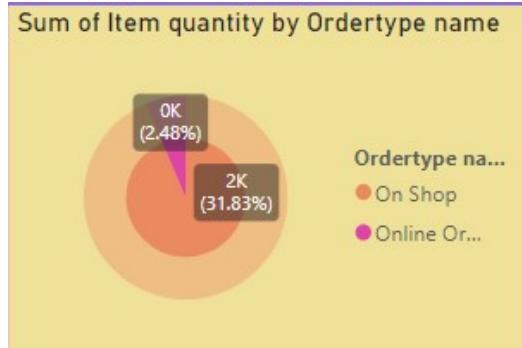


13. Create Pie-Chart:

- Visualizations >Build Visuals >Fields > Legend="Ordertype Name"
- Visualizations >Build Visuals >Fields > Values="Sum of Item quantity"
- Visualizations >Format Visuals> Legend> slices >Color = #374649
- Visualizations >Format Visuals> Values >Color = #374649
- Visualizations >Format Visuals> Legend> slices>on line>Color = #FE6D86
- Visualizations >Format Visuals> Legend> slices>On Shop >Color = #F18F49
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center

- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="Sum of Item quantity by ordertype name"
- Visualizations >Format Visuals> Title> Font Size =16
- Visualizations >Format Visuals> Effects> Background Color = #FFD86C

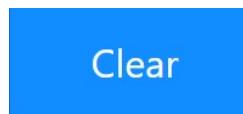
Output:



14. Create a Filter to clear Button:

- Insert > Shapes > Select “Rectangle Shape”
- Visualizations > Format > Shape > Text > “ON” > Text = “Clear”
- Visualizations > Format > Shape > Action > “ON”
- Now make all visuals to initial state the follow next step
- View > BookMark > Add BookMark =”Clear”
- Visualizations > Format > Shape > Action > Select = “BookMark”
- Visualizations > Format> Shape > Action > BookMark =”Clear”

Output:



15. Creating Hierarchy for drill down and drill up operations:

- Data > Category Name > Create hierarchy
- Data > Item Name > Add to hierarchy

- Place cursor on visual > Click “↓” to drill down
- Place cursor on visual > Click “↓” to drill next level of hierarchy

Output:

Initial:

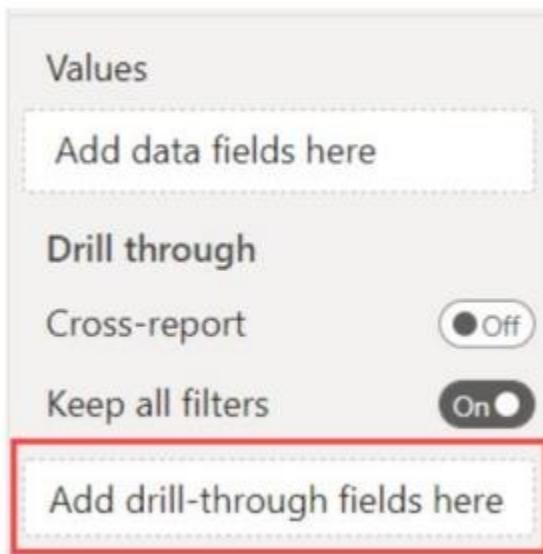


After Drill Down:



Drill through:

- To set up drillthrough, create a target report page that has the visuals you want for the type of entity that you're going to provide drillthrough for.
- Then, on that drillthrough target page, in the **Build visual** section of the Visualizations pane, drag the **field** for which you want to enable drillthrough into the Drill through well.



- Add drill-through field = "CategoryName"

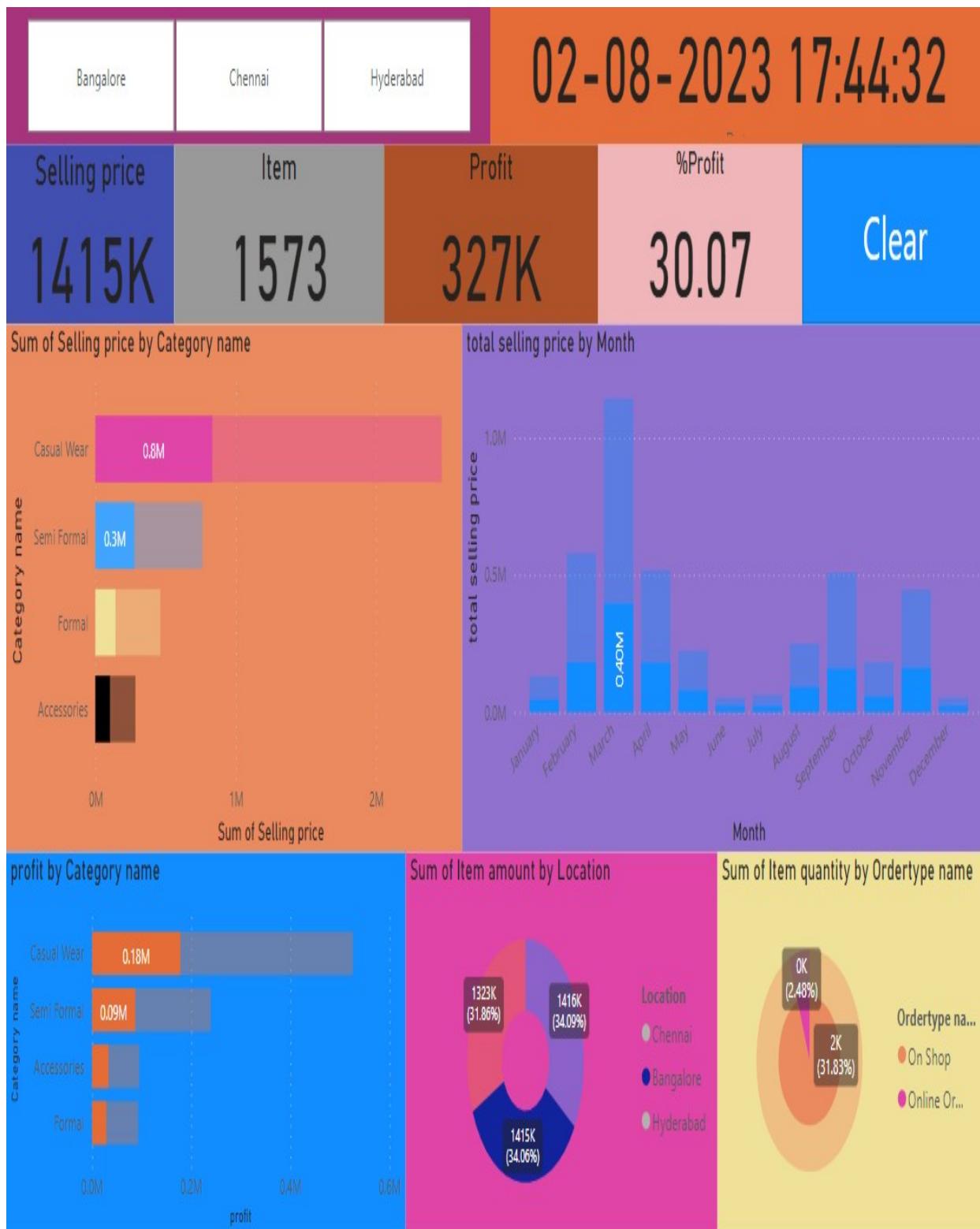
Output:

The screenshot displays the Power BI desktop environment. On the left, there is a table visualization showing sales data with columns: Receipt no, Category name, Item name, Location, Order type name, Sum of Cost Price, Sum of item amount, Year, Quarter, Month, Day, Sum of Selling price, and Sum c. The data includes rows for various items like Jeans - Denim from Bangalore and Chennai, and categories like Casual Wear and Formal. On the right, there is a 'Visualizations' pane with icons for different types of visualizations, a 'Filters' section, and a detailed 'Filters' pane for the current table. The 'Filters' pane shows a list of categories: 'Used as category' (Search, Accessories, Casual Wear, Formal) and 'Allow drill through when:' (is Casual Wear). The 'Casual Wear' checkbox is checked.

16. Final Visual Format:

- Visualizations > Page Information > Name = "Page1"
- Visualizations > canvas Background > color = "#D8D7BF"
- Visualizations > Wall Paper > color = "#FFFFFF"

Output:



Experiment Number: 06

Aim:

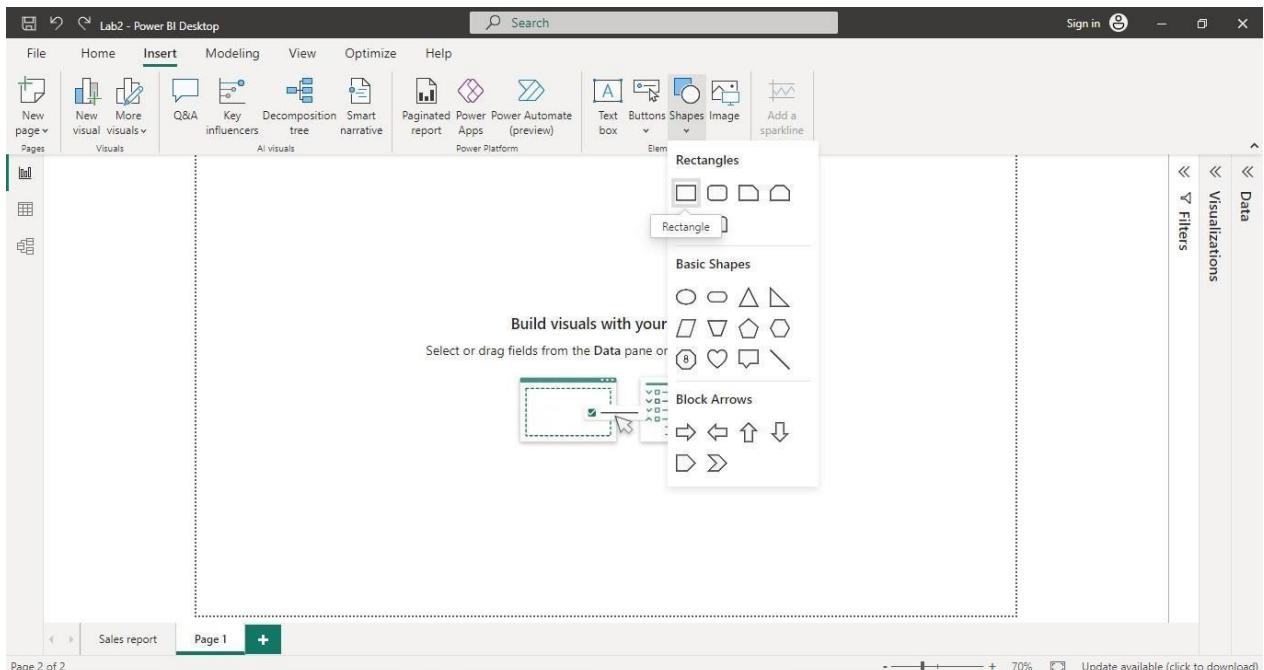
Create Reports using Aggregation functions calculate a value such as count, sum, average, minimum or maximum for all rows in a column or table as defined by the expression.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import yoursample dataset into Power BI.

2. Insert Rectangle Shape:



- Click on “Format tab” on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = “Sales report”, Font Size = 46, Horizontal Alignment = “Center”.

3. Add card for Displaying Sum Values of Profit and sales :

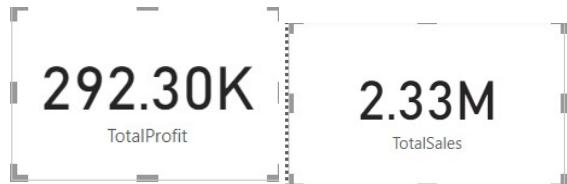
- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.

In the formula bar, enter the following DAX formula to create a measure that calculates the total profit and sales.

```
TotalProfit = CALCULATE(SUM(ORDERS[PROFIT]))  
TotalSales = CALCULATE(sum(Orders[Sales]))
```

- Press Enter to apply the formula.
- Visualization > Format Visual > General > Effects > Background Color : #E6E6E6
- Visualization > Format Visual > Visual > Category Label > Font Size = 12

Output:



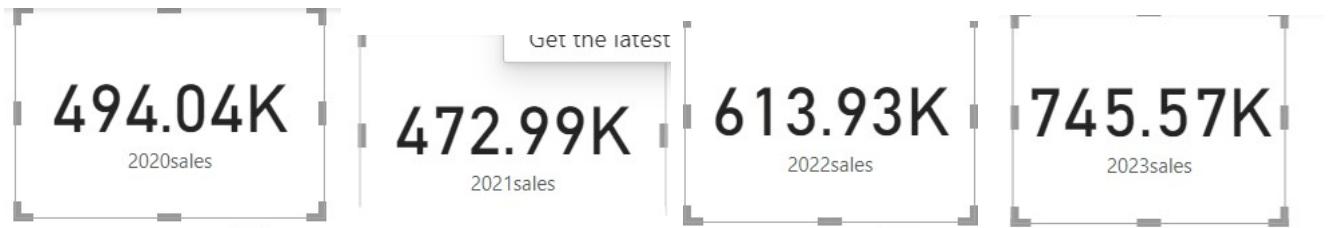
Similarly, calculate the individual years total profit by using the below formulas:

- 2020Profit = CALCULATE(SUM(ORDERS[PROFIT]), year(Orders[Order Date])=2020)

Similarly, calculate the individual years total sales by using the below formulas:

- 2020sales = calculate(sum(Orders[Sales]), year(Orders[Order Date])=2020)

OUTPUT:



4. Add card for Displaying Average Values of Profit and sales :

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the average profit and sales

```
avgprofit = CALCULATE(AVERAGE(Orders[Profit]))  
avgsales = CALCULATE(AVERAGE(Orders[Sales]))
```

- Press Enter to apply the formula.
- Visualization > Format Visual > General > Effects > Background Color : #B6E6E6
- Visualization > Format Visual > Visual > Category Label > Font Size = 12

Output:



Similarly, calculate the individual years average profit by using the below formulas:

- 2020avgProfit = CALCULATE(AVERAGE(ORDERS[PROFIT]), year(Orders[Order Date])=2020)
- 2021avgProfit = CALCULATE(AVERAGE(ORDERS[PROFIT]), year(Orders[Order Date])=2021)
- 2022avgProfit = CALCULATE(AVERAGE(ORDERS[PROFIT]), year(Orders[Order Date])=2022)
- 2023avgProfit = CALCULATE(AVERAGE(ORDERS[PROFIT]), year(Orders[Order Date])=2023)

Similarly, calculate the individual years average sales by using the below formulas:

- 2020avgsales = CALCULATE(AVERAGE(Orders[Sales]), year(Orders[Order Date])=2020)
- 2021avgsales = CALCULATE(AVERAGE(Orders[Sales]), year(Orders[Order Date])=2021)
- 2022avgsales = CALCULATE(AVERAGE(Orders[Sales]), year(Orders[Order Date])=2022)
- 2023avgsales = CALCULATE(AVERAGE(Orders[Sales]), year(Orders[Order Date])=2023)

OUTPUT:



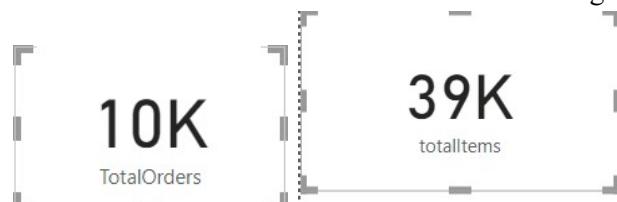
5. Add card for Displaying count of items and orders:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the no of items and orders

```
totalItems = CALCULATE(sum(orders[quantity]))  
TotalOrders = CALCULATE(COUNT(Orders[Order ID]))
```

Press Enter to apply the formula.

- Visualization > Format Visual > General > Effects > Background Color : #E6F2g6
- Visualization > Format Visual > Visual > Category Label > Font Size = 12



Similarly, calculate the individual years orders by using the below formulas:

- 2020OrderCount = CALCULATE(count(Orders[Order ID]), year(Orders[Order Date])=2020)
- 2021OrderCount = CALCULATE(count(Orders[Order ID]), year(Orders[Order Date])=2021)
- 2022OrderCount = CALCULATE(count(Orders[Order ID]), year(Orders[Order Date])=2022)
- 2023OrderCount = CALCULATE(count(Orders[Order ID]), year(Orders[Order Date])=2023)

Output:



Similarly, calculate the individual year items by using the below formulas:

- 2020items = calculate(sum(Orders[Quantity]), year(Orders[Order Date])=2020)
- 2021items = calculate(sum(Orders[Quantity]), year(Orders[Order Date])=2021)
- 2022items = calculate(sum(Orders[Quantity]), year(Orders[Order Date])=2022)
- 2023items = calculate(sum(Orders[Quantity]), year(Orders[Order Date])=2023)

Output:



7. Add card for Displaying max and min no of orders:

- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that calculates the max and min no of orders

```
maxCount = CALCULATE(MAX(Orders[Order ID]))  
minCount = CALCULATE(MIN(Orders[Order ID]))
```

Press Enter to apply the formula.

- Visualization > Format Visual > General > Effects > Background Color : #E6F2g6
- Visualization > Format Visual > Visual > Category Label > Font Size = 14

OUTPUT:



Similarly, calculate the individual year max orders by using the below formulas

- 2020maxCount = CALCULATE(max(Orders[Order ID]),year(Orders[Order Date])=2020)
- 2021maxCount = CALCULATE(max(Orders[Order ID]),year(Orders[Order Date])=2021)
- 2022maxCount = CALCULATE(max(Orders[Order ID]),year(Orders[Order Date])=2022)
- 2023maxCount = CALCULATE(max(Orders[Order ID]),year(Orders[Order Date])=2023)

OUTPUT:



Similarly, calculate the individual year min orders by using the below formulas:

- 2020minCount = CALCULATE(min(Orders[Order ID]),year(Orders[Order Date])=2020)
- 2021minCount = CALCULATE(min(Orders[Order ID]),year(Orders[Order Date])=2021)
- 2022minCount = CALCULATE(min(Orders[Order ID]),year(Orders[Order Date])=2022)
- 2023minCount = CALCULATE(min(Orders[Order ID]),year(Orders[Order Date])=2023)

OUTPUT:



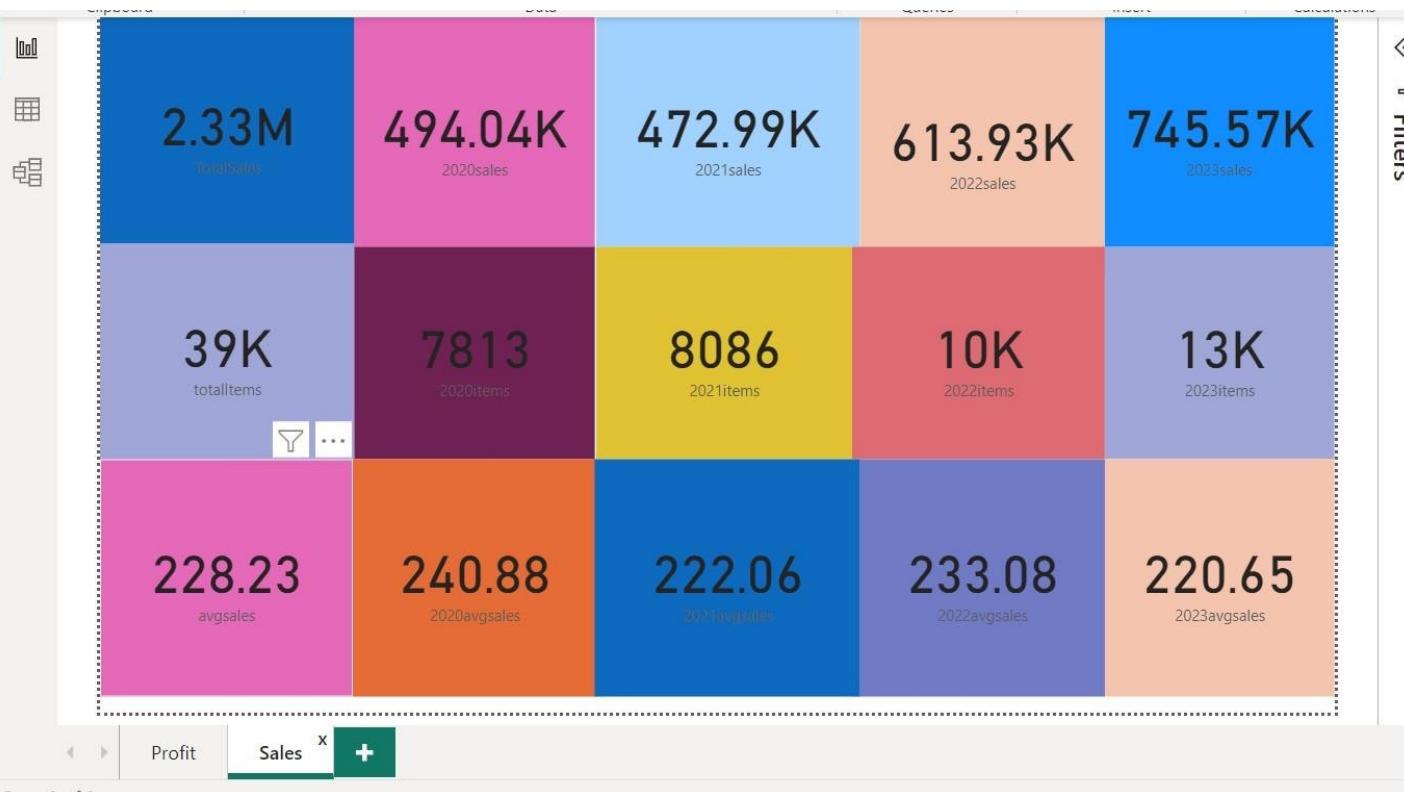
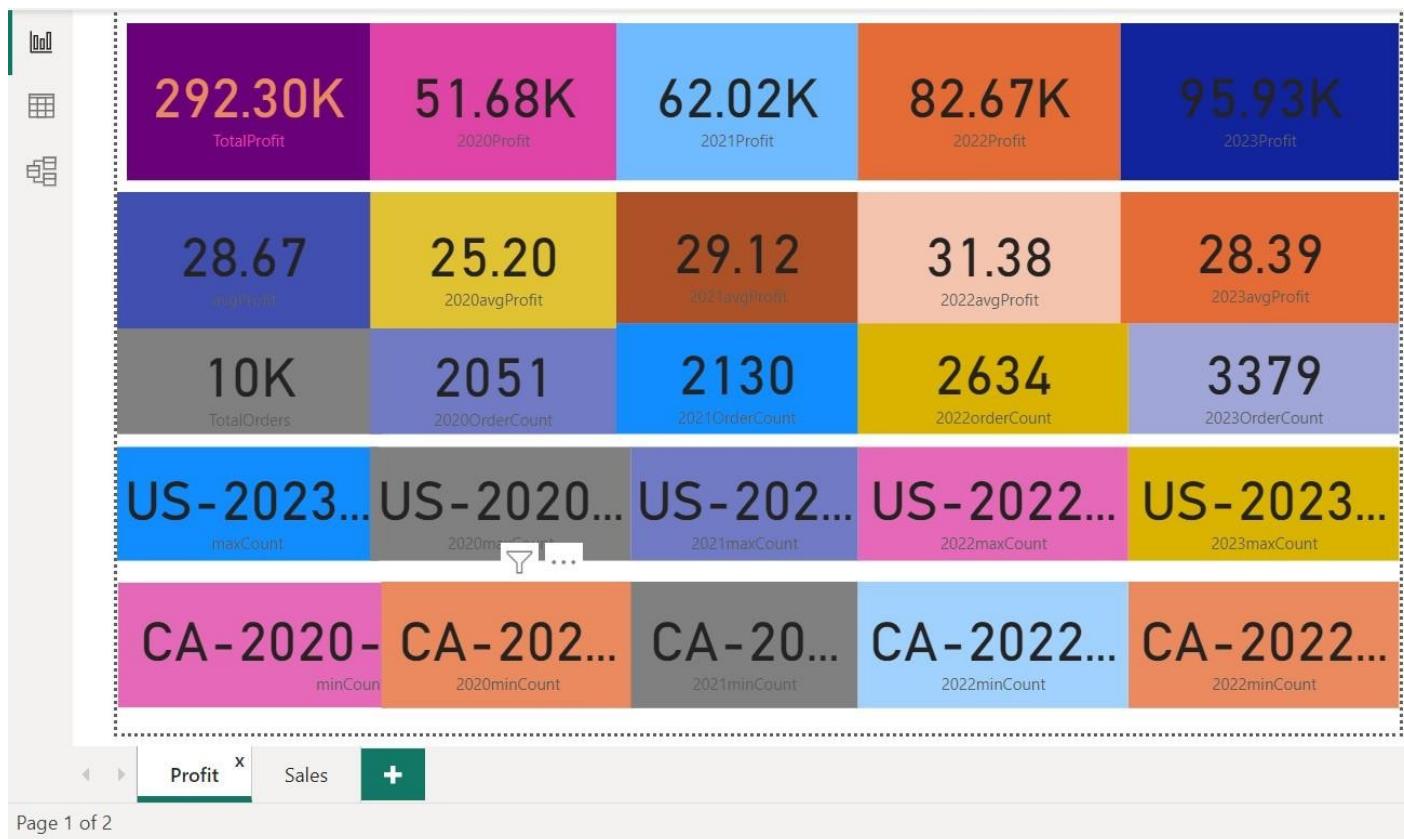
8. Final Visual Format for profit page:

- Visualizations > Page Information > Name =”Profit”
- Visualizations > Canvas Background > color =#12239E
- Visualizations > WallPaper > Color = #A0D1FF

9.Final Visual Format for sales page:

- Visualizations > Page Information > Name =”Sales”
- Visualizations > Canvas Background > color =#12239E
- Visualizations > WallPaper > Color = #A0D1F

Output:



Experiment Number: 07

Aim:

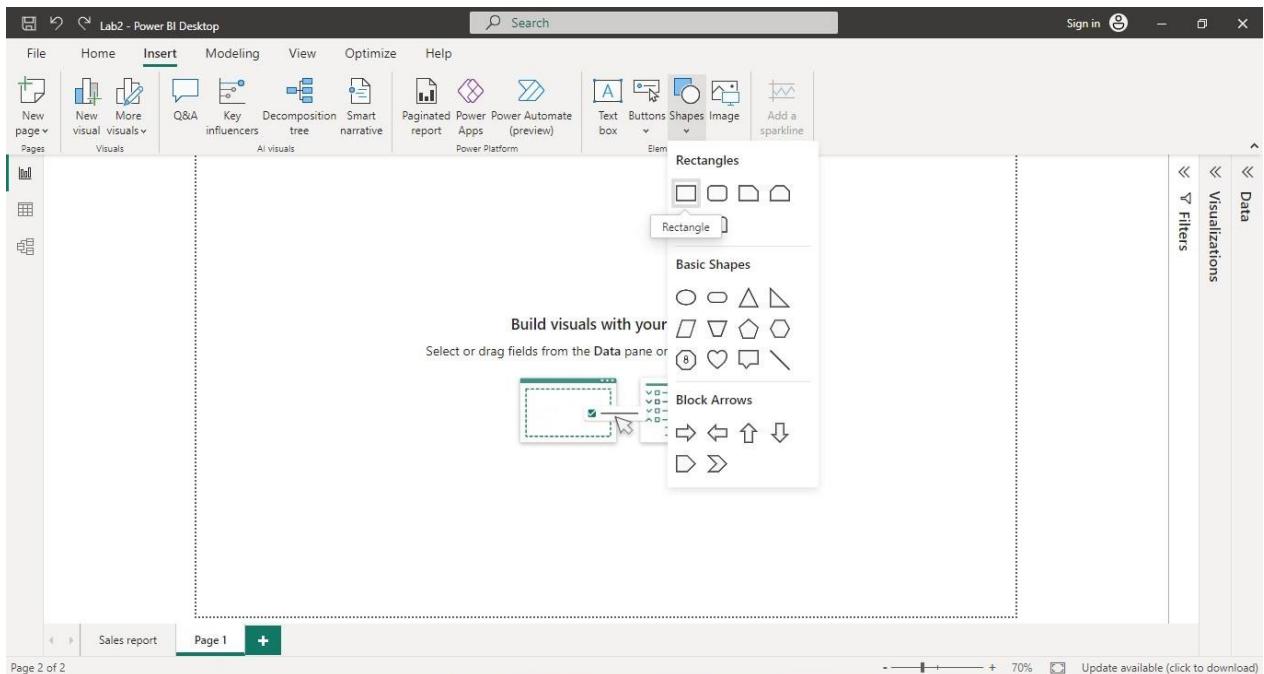
Create reports using calculations based on dates and times.

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import your sample dataset into Power BI.

2. Insert Rectangle Shape:

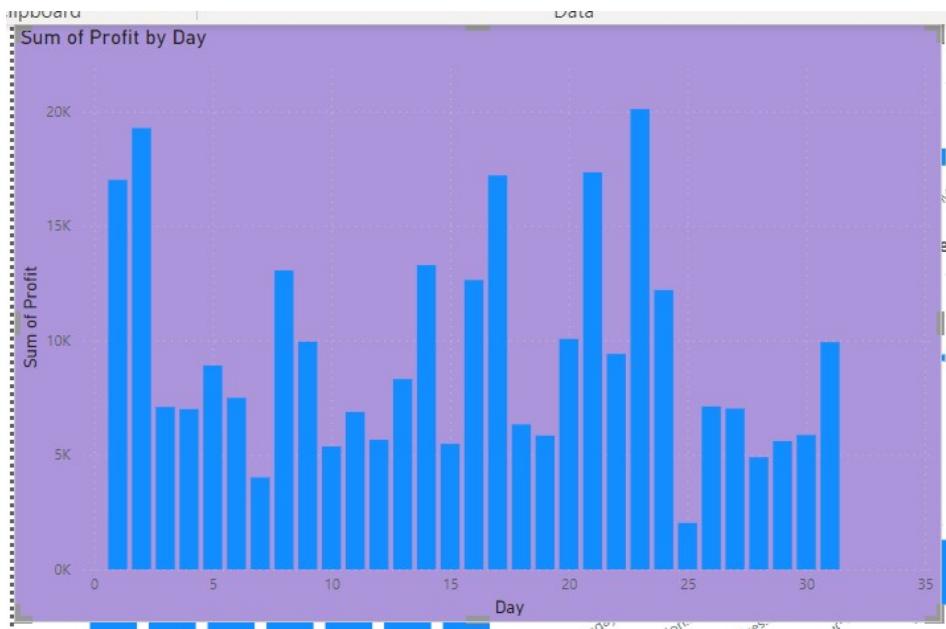


- Click on “Format tab” on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = “Dates and Time”, Font Size = 46, Horizontal Alignment = “Center”

3.Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”day”
- For day data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Day = DAY(Orders[Order Date].[Date])
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by day”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #5C2D91



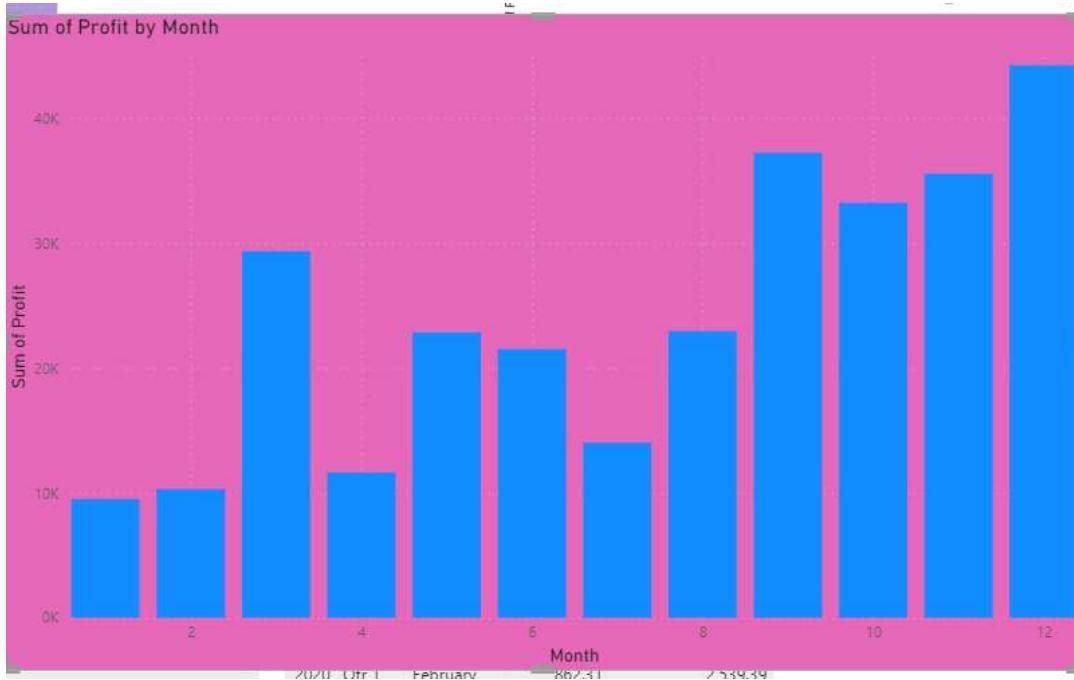
4.Create Stacked Column Chart:

Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”

- Visualizations >Build Visuals >Fields > X-Axis =”month”
- For month data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

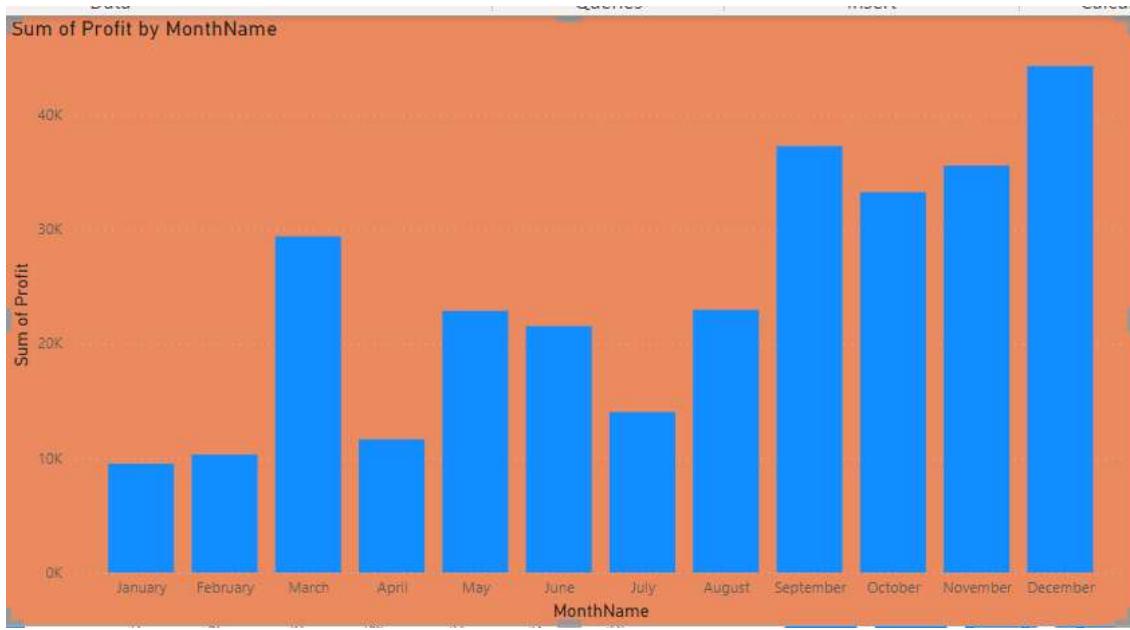
```
Month = MONTH(Orders[Order Date].[Date])
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D

- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="sum of profit by month"
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #e6b999



5.Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis ="sum of profit"
- Visualizations >Build Visuals >Fields > X-Axis ="month name"
- For monthname data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:
`MonthName = Orders[Order Date].[Month]`
Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="sum of profit by month name"
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #ebf89f



6. Create Stacked Column Chart:

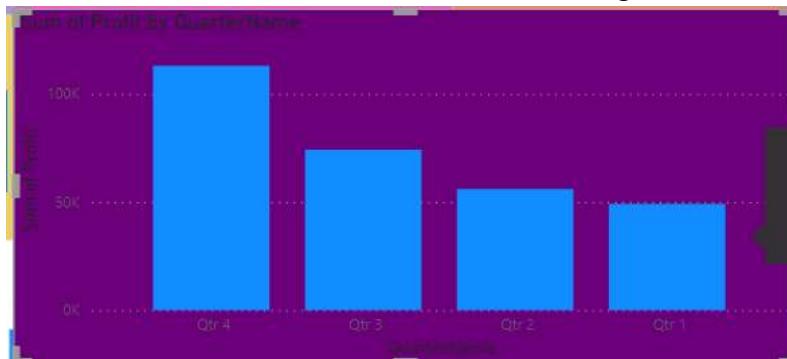
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”quarter”
- For quarter data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:
`Quarter = QUARTER(Orders[Order Date].[Date])`
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by quarter”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #e8d166



7.Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”quarter name”
- For quartername data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

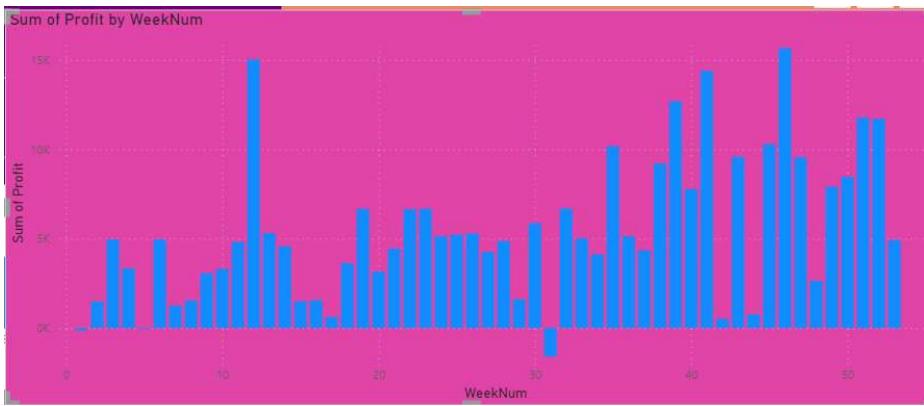
```
QuarterName = Orders[Order Date].[Quarter]
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by quarter name”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #6b0010



8.Create Stacked Column Chart:

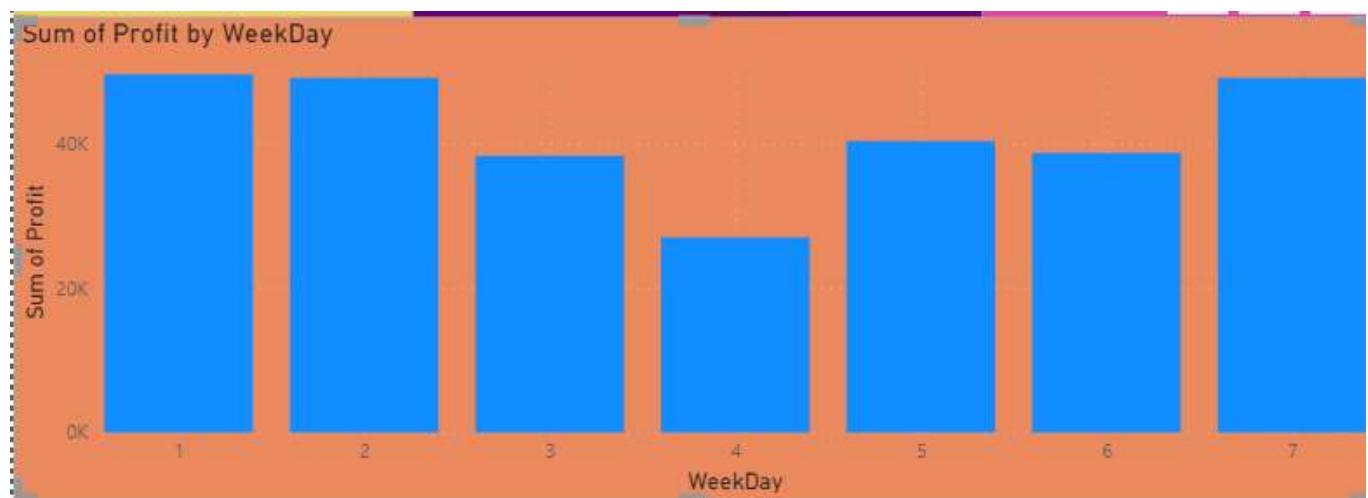
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”week number”
- For weeknum data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
WeekNum = WEEKNUM(Orders[Order Date].[Date])
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by week num”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #EO0047



9. Create Stacked Column Chart:

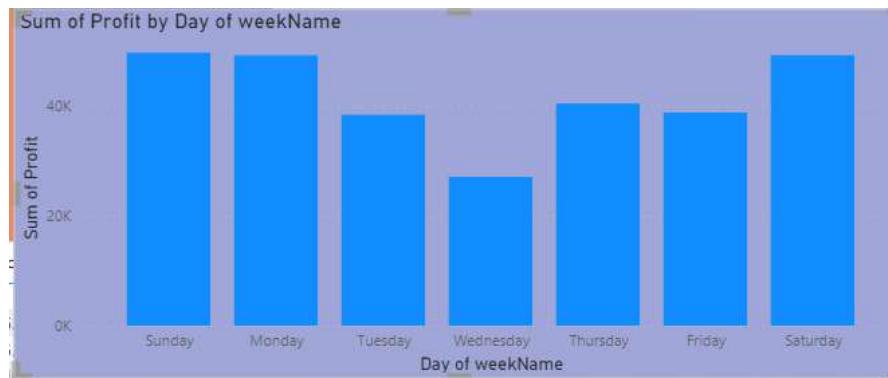
- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”week day”
- For weekday data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:
`WeekDay = WEEKDAY(Orders[Order Date].[Date])`
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by week day”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #ebf567



10. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”day of week name”
- For weekname data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
Day of weekName = FORMAT(Orders[Order Date], "ddd")
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by day of week name”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #a0A078

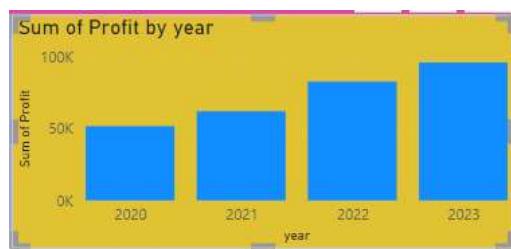


11. Create Stacked Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit”
- Visualizations >Build Visuals >Fields > X-Axis =”year”
- For year data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

```
year = YEAR(Orders[Order Date].[Date])
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit by year”

- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #a0A078



12. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousYear Profit
- Orders->NewColumn->and enter the below dax formula:

```
previousDayProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSDAY(Orders[Order Date].[Date]))
```

Year	Quarter	Month	Day	Sum of Profit	previousDayProfit
2020	Qtr 1	January	3	5.55	
2020	Qtr 1	January	4	-65.99	5.55
2020	Qtr 1	January	5	4.88	-65.99
2020	Qtr 1	January	6	1,358.05	4.88
2020	Qtr 1	January	7	-71.96	1,358.05
2020	Qtr 1	January	8		-71.96
2020	Qtr 1	January	9	10.92	
2020	Qtr 1	January	10	22.65	10.92
2020	Qtr 1	January	11	3.08	22.65
2020	Qtr 1	January	12		3.08
2020	Qtr 1	January	13	673.64	
2020	Qtr 1	January	14	-53.29	673.64
2020	Qtr 1	January	15	65.98	-53.29
2020	Qtr 1	January	16	-5.93	65.98
2020	Qtr 1	January	17		-5.93
2020	Qtr 1	January	18	6.49	
2020	Qtr 1	January	19	-288.00	6.49
2020	Qtr 1	January	20	584.37	-288.00
Total				2,92,296.81	

13. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>previousMonthProfit
- Orders->NewColumn->and enter the below dax formula:

```
previousMonthProfit = CALCULATE(SUM(Orders[Profit]),PREVIOUSMONTH(Orders[Order Date].[Date]))
```

Year	Quarter	Month	Sum of Profit	previousMonthProfit
2020	Qtr 1	January	2,539.39	
2020	Qtr 1	February	862.31	2,539.39
2020	Qtr 1	March	693.45	862.31
2020	Qtr 2	April	3,488.84	693.45
2020	Qtr 2	May	3,196.39	3,488.84
2020	Qtr 2	June	4,999.76	3,196.39
Total				2,92,296.81

14. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > previousqtrProfit
- Orders -> New Column -> and enter the below dax formula:

```
previousqtrProfit = CALCULATE(SUM(Orders[Profit]), PREVIOUSQUARTER(Orders[Order Date].[Date]))
```

Year	Quarter	previousqtrProfit	Sum of Profit
2020	Qtr 1		4,095.15
2020	Qtr 2	4,095.15	11,684.99
2020	Qtr 3	11,684.99	13,517.37
2020	Qtr 4	13,517.37	22,386.79
2021	Qtr 1	22,386.79	9,554.66
2021	Qtr 2	9,554.66	12,200.19
2021	Qtr 3	12,200.19	16,880.30
2021	Qtr 4	16,880.30	23,385.82
2022	Qtr 1	23,385.82	11,628.49
2022	Qtr 2	11,628.49	16,594.68
2022	Qtr 3	16,594.68	16,247.49
2022	Qtr 4	16,247.49	38,194.55
2023	Qtr 1	38,194.55	23,858.60
2023	Qtr 2	23,858.60	15,503.91
2023	Qtr 3	15,503.91	27,545.38
2023	Qtr 4	27,545.38	29,018.46
Total			2,92,296.81

15. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > previousyearprofit
- Orders -> New Column -> and enter the below dax formula:

```
previousyearProfit = CALCULATE(SUM(Orders[Profit]), PREVIOUSYEAR(Orders[Order Date].[Date]))
```

Year	Sum of Profit	previousyearProfit
2020	51,684.30	
2021	62,020.97	51,684.30
2022	82,665.20	62,020.97
2023	95,926.35	82,665.20
Total	2,92,296.81	

16. Create Clustered Column Chart:

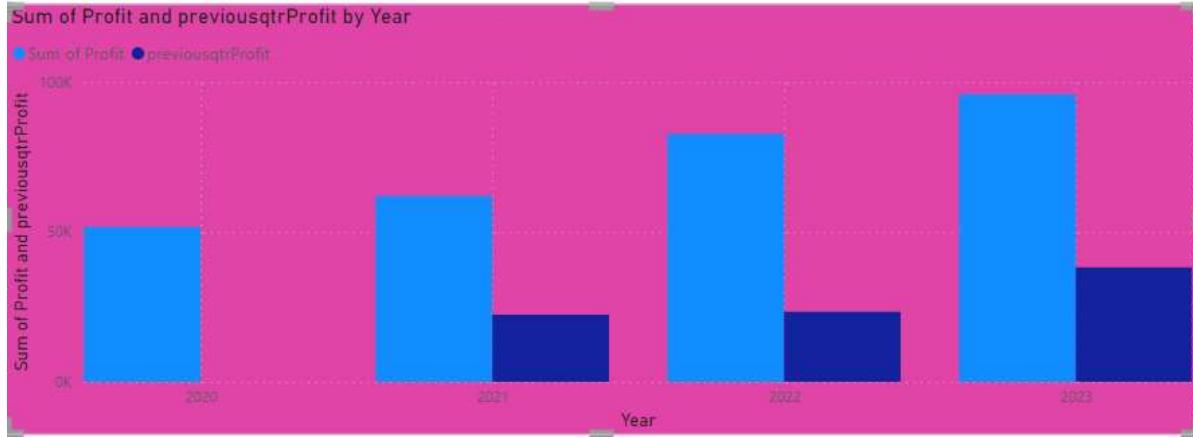
- Visualizations > Build Visuals > Fields > Y -Axis = "sum of profit, previousyearprofit"
- Visualizations > Build Visuals > Fields > X-Axis = "order date"

- For previousyearprofit data field create a new column measure
- Orders -> New Column -> and enter the below dax formula:

```
previousyearProfit = CALCULATE(SUM(Orders[Profit]), PREVIOUSYEAR(Orders[Order Date].[Date]))
```

- Visualizations > Format Visuals > Y-axis > Values > Color = #374649
- Visualizations > Format Visuals > Y-axis > Values > Title > Color = #5F6B6D
- Visualizations > Format Visuals > X-axis > Values > Color = #374649
- Visualizations > Format Visuals > X-axis > Values > Title > Color = #5F6B6D
- Visualizations > Format Visuals > Bar > Show All

- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="sum of profit and previousprofit by year"
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #E044A7



17. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis ="sum of profit,previousqtrprofit"
 - Visualizations >Build Visuals >Fields > X-Axis ="order date"
 - For previousqtrprofit data field create a new column measure
 - Orders->NewColumn->and enter the below dax formula:
- ```
previousqtrProfit = CALCULATE(SUM(Orders[Profit]), PREVIOUSQUARTER(Orders[Order Date].[Date]))
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
  - Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
  - Visualizations >Format Visuals> X-axis> Values >Color = #374649
  - Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
  - Visualizations >Format Visuals> Bar> Show All
  - Visualizations >Format Visuals> Data Labels > Options> Inside Center
  - Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
  - Visualizations >Format Visuals> Title> Text ="sum of profit and previousqtrprofit by quarter"
  - Visualizations >Format Visuals> Title> Font Size =20
  - Visualizations >Format Visuals> Effects> Background Color = #fc67e9

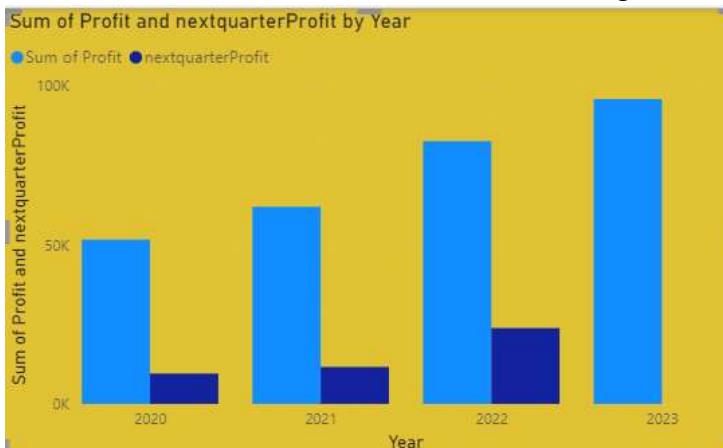


## 18. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,nextqtrprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For nextqtrprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:  

```
nextquarterProfit = CALCULATE(SUM(Orders[Profit]),NEXTQUARTER(Orders[Order Date].[Date]))
```

Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and nextqtrprofit by year”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #e1c233



## 19. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>nextmonthprofit
- Visualizations >Columns>orderDate>profit>nextquarterprofit
- Visualizations >Columns>orderDate>profit>nextyearprofit
- Orders->NewColumn->and enter the below dax formula:

```
nextmonthProfit = CALCULATE(SUM(Orders[Profit]),NEXTMONTH(Orders[Order Date].[Date]))
nextquarterProfit = CALCULATE(SUM(Orders[Profit]),NEXTQUARTER(Orders[Order Date].[Date]))
nextyearProfit = CALCULATE(SUM(Orders[Profit]),NEXTYEAR(Orders[Order Date].[Date]))
```

| Year         | Quarter | Month     | Sum of Profit      | nextmonthProfit | Year         | Quarter | Sum of Profit | nextquarterProfit  |
|--------------|---------|-----------|--------------------|-----------------|--------------|---------|---------------|--------------------|
| 2020         | Qtr 4   | November  | 9,502.90           | 9,554.00        | 2020         | Qtr 1   | 4,095.15      | 11,684.99          |
| 2020         | Qtr 4   | December  | 9,554.66           | -3,189.80       | 2020         | Qtr 2   | 11,684.99     | 13,517.37          |
| 2021         | Qtr 1   | January   | -3,189.80          | 2,813.85        | 2020         | Qtr 3   | 13,517.37     | 22,386.79          |
| 2021         | Qtr 1   | February  | 2,813.85           | 9,930.61        | 2020         | Qtr 4   | 22,386.79     | 9,554.66           |
| 2021         | Qtr 1   | March     | 9,930.61           | 4,187.50        | 2021         | Qtr 1   | 9,554.66      | 12,200.19          |
| 2021         | Qtr 2   | April     | 4,187.50           | 4,677.14        | 2021         | Qtr 2   | 12,200.19     | 16,880.30          |
| 2021         | Qtr 2   | May       | 4,677.14           | 3,335.56        | 2021         | Qtr 3   | 16,880.30     | 23,385.82          |
| 2021         | Qtr 2   | June      | 3,335.56           | 3,288.65        | 2021         | Qtr 4   | 23,385.82     | 11,628.49          |
| 2021         | Qtr 3   | July      | 3,288.65           | 5,371.63        | 2022         | Qtr 1   | 11,628.49     | 16,594.68          |
| 2021         | Qtr 3   | August    | 5,371.63           | 8,220.03        | 2022         | Qtr 2   | 16,594.68     | 16,247.49          |
| 2021         | Qtr 3   | September | 8,220.03           | 2,817.97        | 2022         | Qtr 3   | 16,247.49     | 38,194.55          |
| 2021         | Qtr 3   | October   | 2,817.97           | 12,474.70       | 2022         | Qtr 4   | 38,194.55     | 23,858.60          |
| <b>Total</b> |         |           | <b>2,92,296.81</b> |                 | <b>Total</b> |         |               | <b>2,92,296.81</b> |
|              |         |           |                    |                 | <b>Total</b> |         |               | <b>2,92,296.81</b> |

## 20. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,nextyearprofit”
- Visualizations >Build Visuals >Fields > X-Axis =”order date”
- For nextqtrprofit data field create a new column measure
- Orders->NewColumn->and enter the below dax formula:

nextyearProfit = `CALCULATE(SUM(Orders[Profit]),NEXTYEAR(Orders[Order Date].[Date]))`

Visualizations >Format Visuals> Y-axis> Values >Color = #374649

- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
- Visualizations >Format Visuals> X-axis> Values >Color = #374649
- Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
- Visualizations >Format Visuals> Bar> Show All
- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text =”sum of profit and nextyearprofit by year,quarter,month and day”
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #f5ac4af



## 21. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > 3daysaheadprofit
- Visualizations > Columns > orderDate > profit > 3daysbackprofit
- Orders -> NewColumn -> and enter the below dax formula:

```
3daysaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,DAY))
3DaysBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,DAY))
```

| Year  | Quarter | Month   | Day | Sum of Profit | 3daysaheadprofit | 3DaysBackprofit |
|-------|---------|---------|-----|---------------|------------------|-----------------|
| 2020  | Qtr 1   | January | 1   | -181.41       |                  |                 |
| 2020  | Qtr 1   | January | 2   | -207.05       |                  |                 |
| 2020  | Qtr 1   | January | 3   | 5.55          | 704.28           |                 |
| 2020  | Qtr 1   | January | 4   | -65.99        |                  |                 |
| 2020  | Qtr 1   | January | 5   | 4.88          |                  |                 |
| 2020  | Qtr 1   | January | 6   | 1,358.05      | 15.52            | 5.55            |
| 2020  | Qtr 1   | January | 7   | -71.96        | 758.72           | -65.99          |
| 2020  | Qtr 1   | January | 8   |               | 80.37            | 4.88            |
| 2020  | Qtr 1   | January | 9   | 10.92         | -228.74          | 1,358.05        |
| 2020  | Qtr 1   | January | 10  | 22.65         |                  | -71.96          |
| 2020  | Qtr 1   | January | 11  | 3.08          |                  |                 |
| 2020  | Qtr 1   | January | 12  |               | -1,101.52        | 10.92           |
| Total |         |         |     | 2,92,296.81   | 95,926.35        | 2,91,485.89     |

## 22. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > 3monthsaheadprofit
- Visualizations > Columns > orderDate > profit > 3monthsbackprofit
- Orders -> NewColumn -> and enter the below dax formula:

```
3monthsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,MONTH))
```

```
3monthsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,MONTH))
```

| Year  | Quarter | Month     | 3monthsaheadprofit | 3monthsBackprofit | Sum of Profit |
|-------|---------|-----------|--------------------|-------------------|---------------|
| 2020  | Qtr 1   | January   | 7,231.64           |                   | 2,539.39      |
| 2020  | Qtr 1   | February  | 1,613.87           |                   | 862.31        |
| 2020  | Qtr 1   | March     | 15,013.09          |                   | 693.45        |
| 2020  | Qtr 2   | April     | 957.53             | 2,539.39          | 3,488.84      |
| 2020  | Qtr 2   | May       | 6,299.81           | 862.31            | 3,196.39      |
| 2020  | Qtr 2   | June      | 8,246.57           | 693.45            | 4,999.76      |
| 2020  | Qtr 3   | July      | 7,006.50           | 3,488.84          | -841.48       |
| 2020  | Qtr 3   | August    | 9,488.07           | 3,196.39          | 5,765.23      |
| 2020  | Qtr 3   | September | 11,050.80          | 4,999.76          | 8,593.63      |
| 2020  | Qtr 4   | October   | 10,670.53          | -841.48           | 3,469.17      |
| 2020  | Qtr 4   | November  | 9,692.10           | 5,765.23          | 9,362.96      |
| 2020  | Qtr 4   | December  | 8,655.83           | 8,593.63          | 9,554.66      |
| 2021  | Qtr 1   | January   |                    | 3,469.17          | -3,189.80     |
| 2021  | Qtr 1   | February  |                    | 9,362.96          | 2,813.85      |
| 2021  | Qtr 1   | March     |                    | 9,554.66          | 9,930.61      |
| 2021  | Qtr 2   | April     |                    | -3,189.80         | 4,187.50      |
| 2021  | Qtr 2   | May       |                    | 2,813.85          | 4,677.14      |
| Total |         |           | 95,926.35          | 2,63,278.35       | 2,92,296.81   |

## 23. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > 3quarteraheadprofit
- Visualizations > Columns > orderDate > profit > 3quarterbackprofit

- Orders->NewColumn->and enter the below dax formula:

```
3quartersaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date].[Date],3,QUARTER))
3quartersBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,QUARTER))
```

| Year         | Quarter | Sum of Profit      | 3quarterBackprofit | 3quartersaheadprofit |
|--------------|---------|--------------------|--------------------|----------------------|
| 2022         | Qtr 1   | 11,628.49          | 12,200.19          |                      |
| 2021         | Qtr 1   | 9,554.66           | 11,684.99          |                      |
| 2022         | Qtr 4   | 38,194.55          | 11,628.49          |                      |
| 2021         | Qtr 4   | 23,385.82          | 9,554.66           |                      |
| 2020         | Qtr 4   | 22,386.79          | 4,095.15           | 29,018.46            |
| 2020         | Qtr 1   | 4,095.15           |                    | 23,858.60            |
| 2020         | Qtr 2   | 11,684.99          |                    | 15,503.91            |
| 2020         | Qtr 3   | 13,517.37          |                    | 27,545.38            |
| <b>Total</b> |         | <b>2,92,296.81</b> | <b>2,20,229.07</b> | <b>95,926.35</b>     |

## 24.Create table:

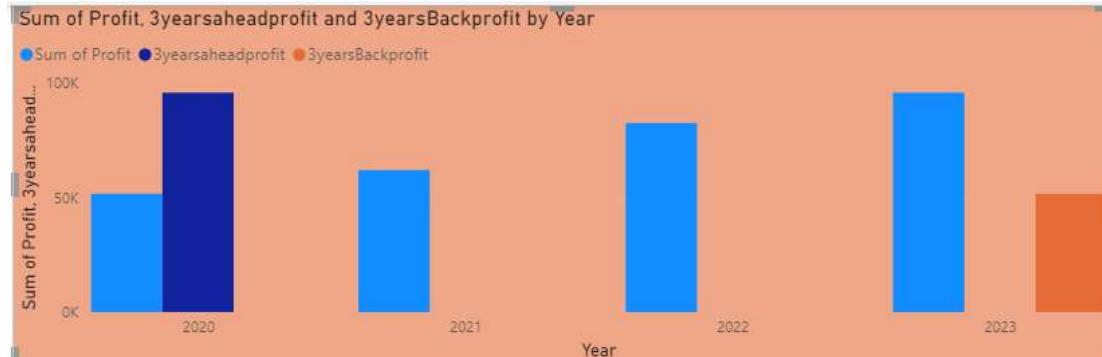
- Home > Enter data > Create table by giving values to the columns
  - Visualizations >Columns>orderDate>profit>3yearsaheadprofit
  - Visualizations >Columns>orderDate>profit>3yearsbackprofit
  - Orders->NewColumn->and enter the below dax formula:
- ```
3yearsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,year))
3yearsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,year))
```

Year	Sum of Profit	3yearsaheadprofit	3yearsBackprofit
2020	51,684.30	95,926.35	
2021	62,020.97		
2022	82,665.20		
2023	95,926.35		51,684.30
Total	2,92,296.81	95,926.35	51,684.30

25.Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis =”sum of profit,3yearsbackprofit,3yearsaheadprofit”
 - Visualizations >Build Visuals >Fields > X-Axis =”order date”
 - For 3yearsaheadprofit, 3yearsBackprofit data field create a new column measure
 - Orders->NewColumn->and enter the below dax formula:
- ```
3yearsaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,year))
3yearsBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,year))
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
  - Visualizations >Format Visuals> X-axis> Values >Color = #374649
  - Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
  - Visualizations >Format Visuals> Bar> Show All

- Visualizations >Format Visuals> Data Labels > Options> Inside Center
- Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
- Visualizations >Format Visuals> Title> Text ="sum of profit ,3yearsaheadprofit and 3yearsbackprofit by year.
- Visualizations >Format Visuals> Title> Font Size =20
- Visualizations >Format Visuals> Effects> Background Color = #f0af87



## 26. Create Clustered Column Chart:

- Visualizations >Build Visuals >Fields > Y –Axis ="sum of profit,3quartersbackprofit,3quarteraheadprofit"
  - Visualizations >Build Visuals >Fields > X-Axis ="order date"
  - For 3yearsaheadprofit , 3yearsBackprofit data field create a new column measure
  - Orders->NewColumn->and enter the below dax formula:
- ```
3quartersaheadprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],3,QUARTER))
3quartersBackprofit = CALCULATE(sum(Orders[Profit]),DATEADD(Orders[Order Date].[Date],-3,QUARTER))
```
- Visualizations >Format Visuals> Y-axis> Values >Color = #374649
- Visualizations >Format Visuals> Y-axis> Values >Title >Color = #5
 - Visualizations >Format Visuals> X-axis> Values >Color = #374649
 - Visualizations >Format Visuals> X-axis> Values >Title >Color = #5F6B6D
 - Visualizations >Format Visuals> Bar> Show All
 - Visualizations >Format Visuals> Data Labels > Options> Inside Center
 - Visualizations >Format Visuals> Data Labels> Values > Font Size = 14
 - Visualizations >Format Visuals> Title> Text ="sum of profit ,3yearsaheadprofit and 3yearsbackprofit by year.
 - Visualizations >Format Visuals> Title> Font Size =20
 - Visualizations >Format Visuals> Effects> Background Color = # E044A7



27. Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > sameperiodlastyearprofit
- Orders -> New Column -> and enter the below DAX formula:
`sameperiodlastyearprofit = CALCULATE(SUM(Orders[Profit]), SAMEPERIODLASTYEAR(Orders[Order Date].[Date]))`

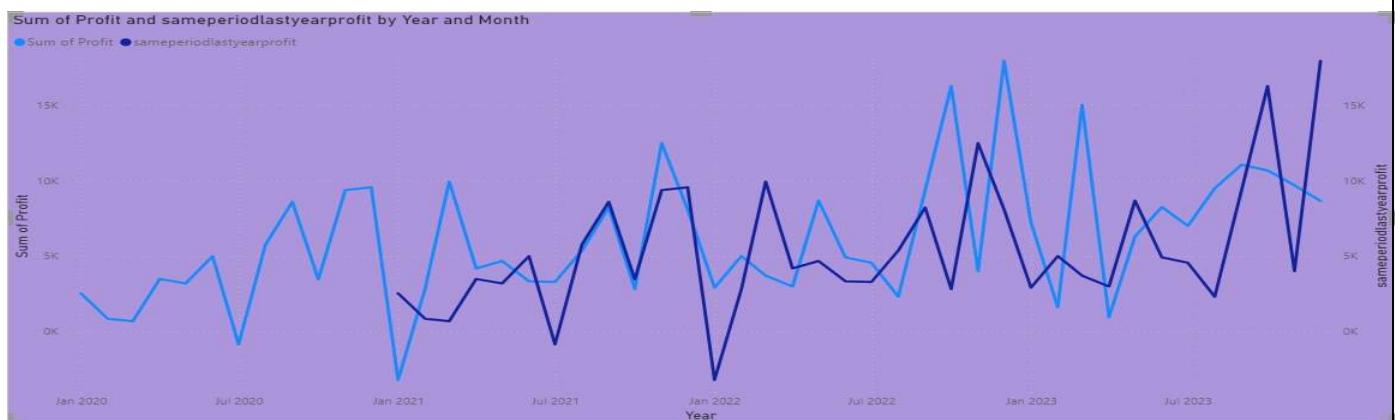
Year	Sum of Profit	sameperiodlastyearprofit
2020	51,684.30	
2021	62,020.97	51684
2022	82,665.20	62021
2023	95,926.35	82665
Total	2,92,296.81	196370

28. Create Line Chart:

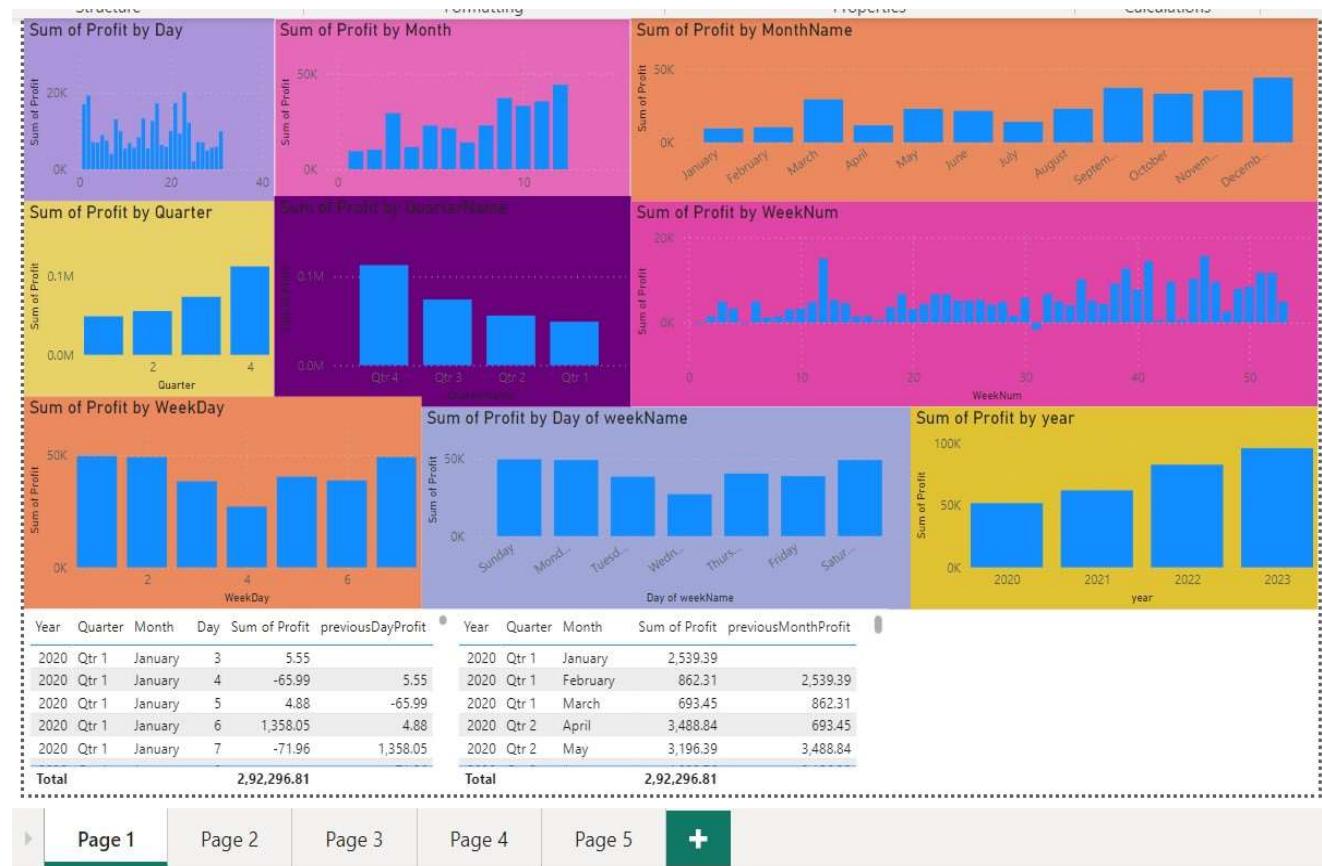
- Visualizations > Build Visuals > Fields > Y-Axis = "sum of profit,"
- Visualizations > Build Visuals > Fields > Second chart - Y-Axis = sameperiodlastyear"
- Visualizations > Build Visuals > Fields > X-Axis = "order date"
- For sameperiodlastyear data field create a new column measure
- Orders -> New Column -> and enter the below DAX formula:

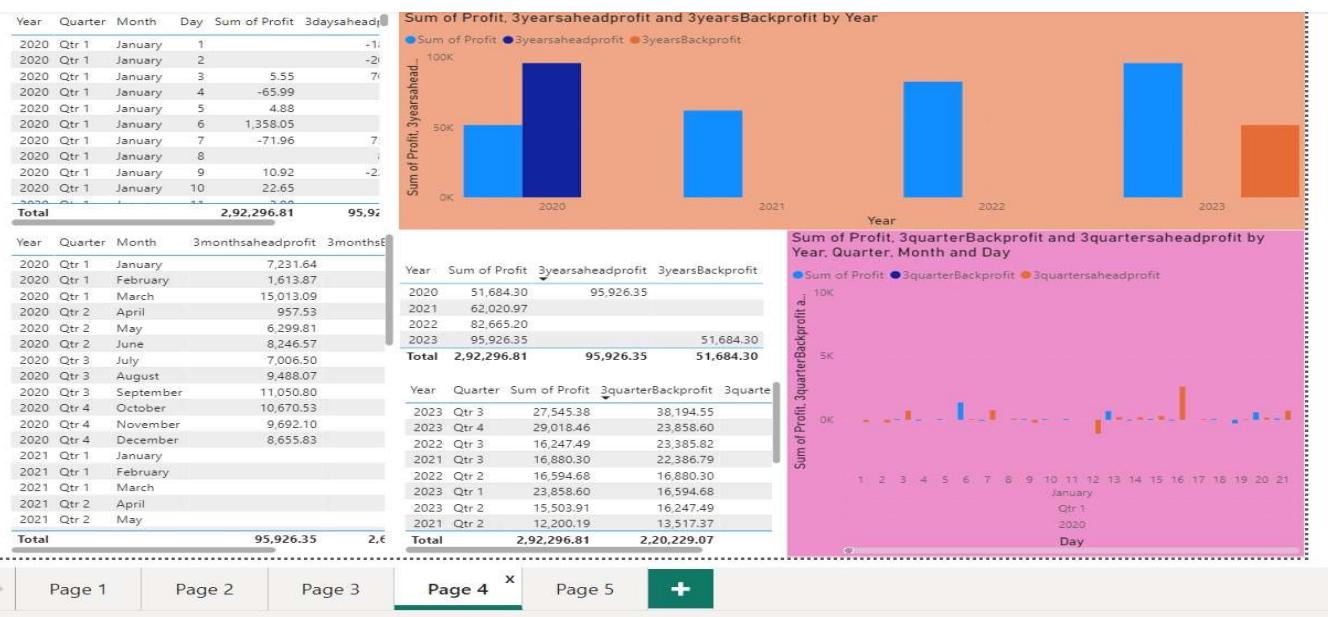
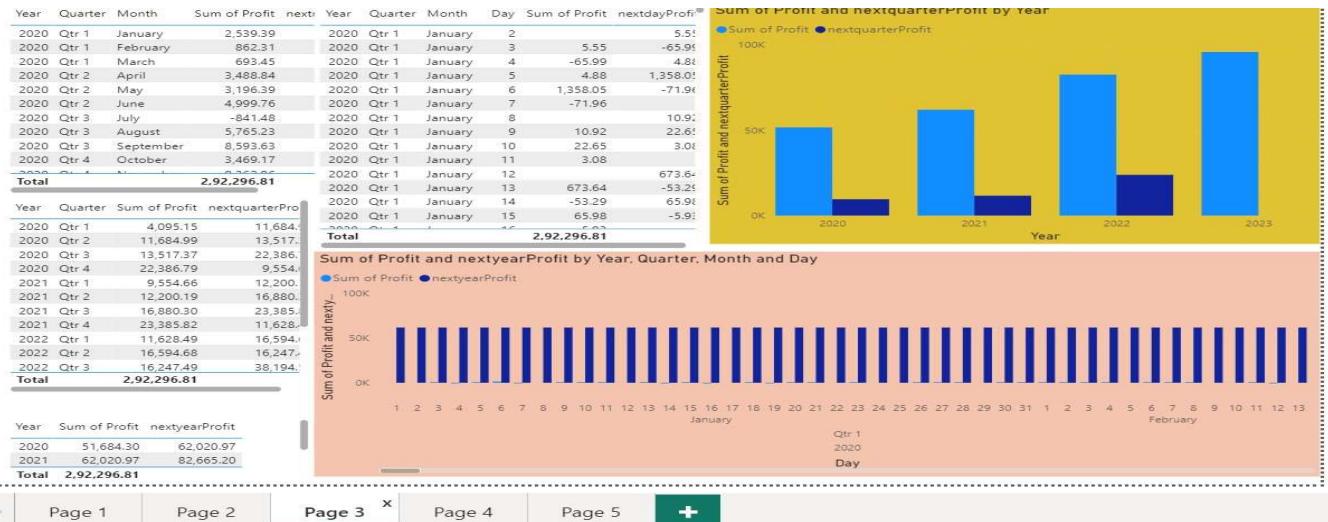
`sameperiodlastyearprofit = CALCULATE(SUM(Orders[Profit]), SAMEPERIODLASTYEAR(Orders[Order Date].[Date]))`

- Visualizations > Format Visuals > Y-axis > Values > Color = #374649
- Visualizations > Format Visuals > Y-axis > Values > Title > Color = #5
- Visualizations > Format Visuals > X-axis > Values > Color = #374649
- Visualizations > Format Visuals > X-axis > Values > Title > Color = #5F6B6D
- Visualizations > Format Visuals > Bar > Show All
- Visualizations > Format Visuals > Data Labels > Options > Inside Center
- Visualizations > Format Visuals > Data Labels > Values > Font Size = 14
- Visualizations > Format Visuals > Title > Text = "sum of profit and sameperiodlastyearprofit by year and month"
- Visualizations > Format Visuals > Title > Font Size = 20
- Visualizations > Format Visuals > Effects > Background Color = # Ef567w



Final Output:





Experiment Number: 08

Aim:

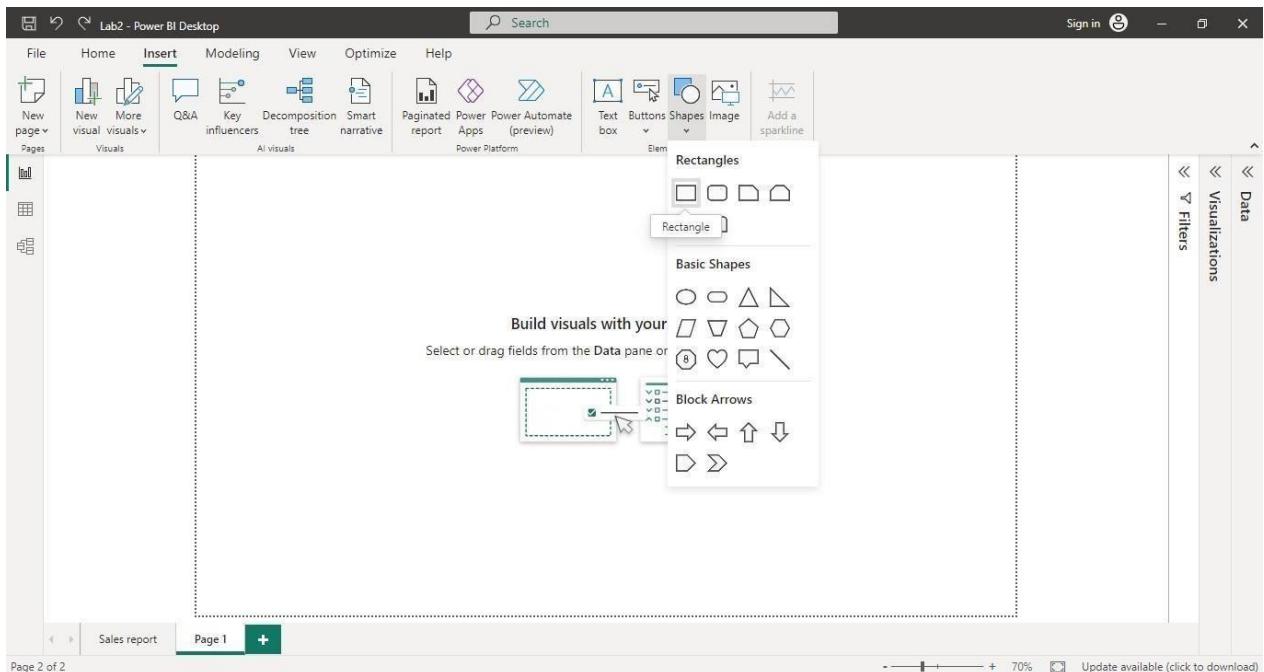
Create reports using MTD,YTD,QTD In power-bi?

Procedure:

1. Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import yoursample dataset into Power BI.

2. Insert Rectangle Shape:



- Click on “Format tab” on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = “Page1”, Font Size = 46, Horizontal Alignment = “Center”.

3.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>Quantity>mtd item quantity
- Click on new measure>and enter the below dax formula:
`Mtd item qty = TOTALMTD(SUM(Orders[Quantity]),Orders[Order Date].[Date])`

Year	Quarter	Month	Day	Sum of Quantity	Mtd item qty
2020	Qtr 1	January	25	25	25
2020	Qtr 1	January	26	38	291
2020	Qtr 1	January	27	8	299
2020	Qtr 1	January	28	1	300
2020	Qtr 1	January	29		300
2020	Qtr 1	January	30	4	304
2020	Qtr 1	January	31	2	306
2020	Qtr 1	February	1	6	6
2020	Qtr 1	February	2	12	18
2020	Qtr 1	February	3	5	23
2020	Qtr 1	February	4	9	32
2020	Qtr 1	February	5		32
2020	Qtr 1	February	6	12	44
Total				38654	1820

4.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>Quantity>qtd item quantity
- Click on new measure>and enter the below dax formula:
`qtd item qty = TOTALQTD(SUM(Orders[Quantity]),Orders[Order Date].[Date])`

Year	Quarter	Month	Sum of Quantity	qtd item qty
	Qtr 2	April	536	536
	Qtr 2	May	504	1040
	Qtr 2	June	524	1564
	Qtr 3	July	550	550
	Qtr 3	August	624	1174
	Qtr 3	September	1015	2189
	Qtr 4	October	605	605
	Qtr 4	November	1235	1840
	Qtr 4	December	1158	2998
	Qtr 1	January	260	260
	Qtr 1	February	239	499
	Qtr 1	March	528	1027
	Qtr 2	April	543	543
Total				38654 4828

5.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>Quantity>ytd item quantity
- Click on new measure>and enter the below dax formula:

`Ytd item qty = TOTALYTD(SUM(Orders[Quantity]),Orders[Order Date].[Date])`

Year	Quarter	Sum of Quantity	ytd item qty
2020	Qtr 1	1062	1062
2020	Qtr 2	1564	2626
2020	Qtr 3	2189	4815
2020	Qtr 4	2998	7813
2021	Qtr 1	1027	1027
2021	Qtr 2	1624	2651
2021	Qtr 3	2250	4901
2021	Qtr 4	3185	8086
2022	Qtr 1	1280	1280
2022	Qtr 2	2283	3563
2022	Qtr 3	2803	6366
2022	Qtr 4	3652	10018
2023	Qtr 1	1808	1808
Total			
38654 12737			

6.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>Total Mtd Orders
- Visualizations >Columns>orderDate>Total qtd Orders
- Visualizations >Columns>orderDate>Total ytd Orders
- Click on new measure>and enter the below dax formula:

Total Mtd Orders = `TOTALMTD(Count(Orders[Order ID]),Orders[Order Date].[date])`

Total Qtd Orders = `TOTALQTD(Count(Orders[Order ID]),Orders[Order Date].[date])`

Total Ytd Orders = `TOTALYTD(Count(Orders[Order ID]),Orders[Order Date].[date])`

Year	Quarter	Month	Total Mtd Orders	Total qtd Orders	Total Ytd Orders
2020	Qtr 1	January	84	84	84
2020	Qtr 1	February	46	130	130
2020	Qtr 1	March	159	289	289
2020	Qtr 2	April	135	135	424
2020	Qtr 2	May	132	267	556
2020	Qtr 2	June	136	403	692
2020	Qtr 3	July	143	143	835
2020	Qtr 3	August	158	301	993
2020	Qtr 3	September	273	574	1266
2020	Qtr 4	October	168	168	1434
2020	Qtr 4	November	320	488	1754
2020	Qtr 4	December	297	785	2051
2021	Qtr 1	January	64	64	64
2021	Qtr 1	February	64	128	128
2021	Qtr 1	March	141	269	269
2021	Qtr 2	April	160	160	420
Total			482	1251	3379

7.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>mtdProfit
- Click on new measure>and enter the below dax formula:

MTDprofit = `CALCULATE(sum(Orders[Profit]),DATESMTD(Orders[Order Date].[Date]))`

Year	Quarter	Month	Day	Sum of Profit	MTDprofit
2020	Qtr 1	January	26	1,500.00	1,500.00
2020	Qtr 1	January	27	9.68	2,523.00
2020	Qtr 1	January	28	1.33	2,524.32
2020	Qtr 1	January	29	2,524.32	
2020	Qtr 1	January	30	11.65	2,535.97
2020	Qtr 1	January	31	3.42	2,539.39
2020	Qtr 1	February	1	206.32	206.32
2020	Qtr 1	February	2	7.15	213.47
2020	Qtr 1	February	3	31.56	245.03
2020	Qtr 1	February	4	51.14	296.17
2020	Qtr 1	February	5	296.17	
2020	Qtr 1	February	6	76.48	372.66
2020	Qtr 1	February	7	59.35	432.01
2020	Qtr 1	February	8	5.53	437.54
2020	Qtr 1	February	9	437.54	
2020	Qtr 1	February	10	437.54	
Total				2,92,296.81	8,655.83

8.Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations >Columns>orderDate>profit>qtdProfit
- Click on new measure>and enter the below dax formula:

QTDprofit = `CALCULATE(sum(Orders[Profit]),DATESQTD(Orders[Order Date].[Date]))`

Year	Quarter	Month	Sum of Profit	QTDprofit
2021	Qtr 1	January	-3,189.80	-3,189.80
2021	Qtr 1	February	2,813.85	-375.95
2021	Qtr 1	March	9,930.61	9,554.66
2021	Qtr 2	April	4,187.50	4,187.50
2021	Qtr 2	May	4,677.14	8,864.63
2021	Qtr 2	June	3,335.56	12,200.19
2021	Qtr 3	July	3,288.65	3,288.65
2021	Qtr 3	August	5,371.63	8,660.28
2021	Qtr 3	September	8,220.03	16,880.30
2021	Qtr 4	October	2,817.97	2,817.97
2021	Qtr 4	November	12,474.79	15,292.75
2021	Qtr 4	December	8,093.06	23,385.82
2022	Qtr 1	January	2,916.02	2,916.02
2022	Qtr 1	February	5,004.58	7,920.60
2022	Qtr 1	March	3,707.89	11,628.49
Total			2,92,296.81	29,018.46

9..Create table:

- Home > Enter data > Create table by giving values to the columns
- Visualizations > Columns > orderDate > profit > ytdProfit
- Click on new measure > and enter the below dax formula:

YTDprofit = `CALCULATE(sum(Orders[Profit]),DATESYTD(Orders[Order Date].[Date]))`

Year	Quarter	Sum of Profit	YTDprofit
2020	Qtr 1	4,095.15	4,095.15
2020	Qtr 2	11,684.99	11,684.99
2020	Qtr 3	13,517.37	13,517.37
2020	Qtr 4	22,386.79	22,386.79
2021	Qtr 1	9,554.66	9,554.66
2021	Qtr 2	12,200.19	12,200.19
2021	Qtr 3	16,880.30	16,880.30
2021	Qtr 4	23,385.82	23,385.82
2022	Qtr 1	11,628.49	11,628.49
2022	Qtr 2	16,594.68	16,594.68
2022	Qtr 3	16,247.49	16,247.49
2022	Qtr 4	38,194.55	38,194.55
2023	Qtr 1	23,858.60	23,858.60
2023	Qtr 2	15,503.91	15,503.91
2023	Qtr 3	27,545.38	27,545.38
Total			2,92,296.81
			29,018.46

Final Output:

The screenshot displays a Microsoft Power BI report interface. On the left, there are three small icons: a grid, a calendar, and a document. Below these are three large tables of data.

Table 1: Daily Quantity Data

Year	Quarter	Month	Day	Sum of Quantity	Mtd item qty
2020	Qtr 1	January	27	8	299
2020	Qtr 1	January	28	1	300
2020	Qtr 1	January	29		300
2020	Qtr 1	January	30	4	304
2020	Qtr 1	January	31	2	306
2020	Qtr 1	February	1	6	6
2020	Qtr 1	February	2	12	18
2020	Qtr 1	February	3	5	23
2020	Qtr 1	February	4	9	32
2020	Qtr 1	February	5		32
2020	Qtr 1	February	6	12	44
2020	Qtr 1	February	7	11	55
Total				38654	1820

Table 2: Daily Profit Data

Quarter	Month	Day	Sum of Profit	MTDprofit
Qtr 1	January	16	0.49	1,934.07
Qtr 1	January	19	-288.00	1,666.07
Qtr 1	January	20	584.37	2,250.44
Qtr 1	January	21	93.30	2,343.75
Qtr 1	January	22		2,343.75
Qtr 1	January	23	19.24	2,362.99
Qtr 1	January	24		2,362.99
Qtr 1	January	25		2,362.99
Qtr 1	January	26	150.33	2,513.31
Qtr 1	January	27	9.68	2,523.00
Qtr 1	January	28	1.33	2,524.32
Qtr 1	January	29		2,524.32
Qtr 1	January	30	11.65	2,535.97
Qtr 1	January	31	3.42	2,539.39
Qtr 1	February	1	206.32	206.32
Total			2,92,296.81	8,655.83

Table 3: Total MTD and YTD Orders

Year	Quarter	Month	Sum of Profit	QTDprofit	Year	Quarter	Month	Sum of Profit	YTDprofit
2020	Qtr 1	January	2,539.39	2,539.39	2020	Qtr 1	January	4,095.15	4,095.15
2020	Qtr 1	February	862.31	3,401.70	2020	Qtr 2	11,684.99	11,684.99	
2020	Qtr 1	March	693.45	4,095.15	2020	Qtr 3	13,517.37	13,517.37	
2020	Qtr 2	April	3,488.84	3,488.84	2020	Qtr 4	22,386.79	22,386.79	
2020	Qtr 2	May	3,196.39	6,685.23	2021	Qtr 1	9,554.66	9,554.66	
2020	Qtr 2	June	4,999.76	11,684.99	2021	Qtr 2	12,200.19	12,200.19	
2020	Qtr 3	July	-841.48	-841.48	2021	Qtr 3	16,880.30	16,880.30	
2020	Qtr 3	August	5,765.23	4,923.74	2021	Qtr 4	23,385.82	23,385.82	
2020	Qtr 3	September	8,593.63	13,517.37	2022	Qtr 1	11,628.49	11,628.49	
2020	Qtr 4	October	3,469.17	3,469.17	2022	Qtr 2	16,594.68	16,594.68	
2020	Qtr 4	November	9,362.96	12,832.13	2022	Qtr 3	16,247.49	16,247.49	
2020	Qtr 4	December	9,554.66	22,386.79	2022	Qtr 4	38,194.55	38,194.55	
2021	Qtr 1	January	-3,189.80	-3,189.80	2023	Qtr 1	23,858.60	23,858.60	
2021	Qtr 1	February	2,813.85	-375.95	2023	Qtr 2	15,503.91	15,503.91	
2021	Qtr 1	March	9,930.61	9,554.66	2023	Qtr 3	27,545.38	27,545.38	
Total			2,92,296.81	29,018.46	2022 Qtr 4		29,018.46	29,018.46	
Total			2,92,296.81	29,018.46	Total		2,92,296.81	29,018.46	

Below the tables are navigation buttons: a left arrow, a right arrow, a plus sign, and a search bar. To the right, there is a "My Dell" button.

Page 1 of 1

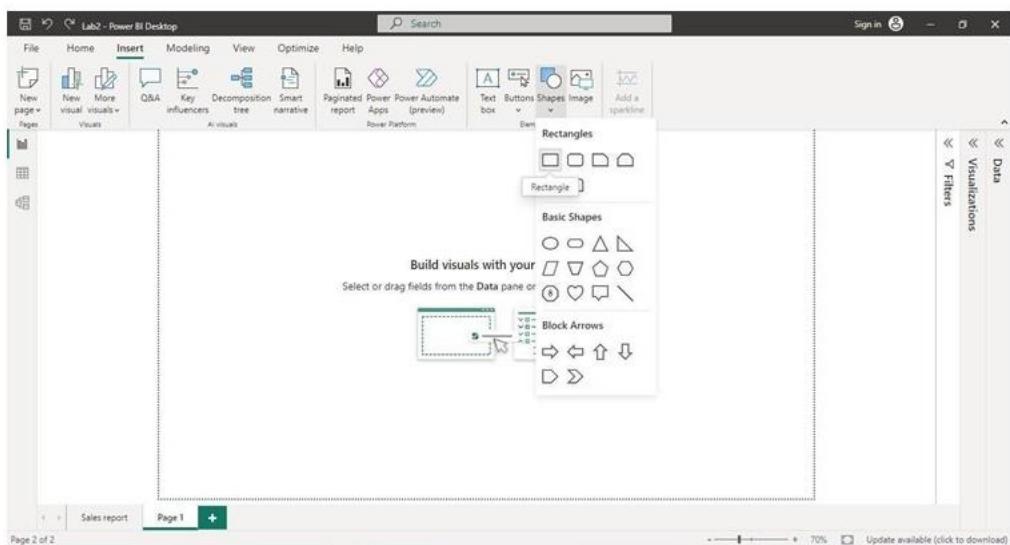
Experiment Number: 09

Aim: Create Reports using Filter Functions in DAX

1.Importing the Dataset:

- Launch Power BI Desktop.
- Click on "Get Data" in the Home tab of the ribbon.
- Select the appropriate data source option "Excel" and follow the prompts to import yoursample dataset into Power BI.
- Select sample-super store data,xsl
- Select orders table from the check-boxws.

2.Insert Rectangle Shape:



- Click on “Format tab” on right side and perform changes on visual.
- Shape > Style > #E66C37
- Shape > Text >Text = “Page1”, Font Size = 46, Horizontal Alignment = “Center”.

3.Create Table:

- Create table and place it in the report
- In the fields column drag and drop category

Category
Furniture
Office Supplies
Technology
Total

4.Create Table for calculating profits:

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:
`Total Profit = SUM(Orders[profit])`
- Visualizations >Columns>Total profit

Category	Total Profit
Furniture	19,730.00
Office Supplies	1,26,023.44
Technology	1,46,543.38
Total	2,92,296.81

5.Applying ALL-Filter:

Syntax: ALL(<table>|<column>].<column>[,...]]])

Description: returns all the rows in a table or all the values in the column, ignoring any filters that have been applied. This function is useful for clearing filters and creating calculations or all the rows in a table

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

`All profit filter = CALCULATE([Total Profit],ALL(orders))`

Category	Total Profit	All profit filter
Furniture	19,730.00	2,92,296.81
Office Supplies	1,26,023.44	2,92,296.81
Technology	1,46,543.38	2,92,296.81
Total	2,92,296.81	2,92,296.81

6.Applying ALLAccept:

Syntax: ALLACCEPT(<table>|<column>].<column>[,...]]])

Description: returns all the rows in a table or all the values in the column, ignoring any filters that have been applied except the given coulmn. This function is useful for clearing filters and creating calculations or all the rows in a table except given column.

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

```
All profit Except Cat = CALCULATE([Total Profit], ALLEXCEPT(Orders, Orders[Category]))
```
- Visualizations >Columns>All profit Except cat

Category	Total Profit	All profit filter	All profit Except Cat
Furniture	19,730.00	2,92,296.81	19,730.00
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44
Technology	1,46,543.38	2,92,296.81	1,46,543.38
Total	2,92,296.81	2,92,296.81	2,92,296.81

7.calculating % of profit for each category:

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

```
%profit Cat = DIVIDE([Total Profit], [All profit filter])
```
- Visualizations >Columns>%profit cat
- Change the mode to %

Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat
Furniture	19,730.00	2,92,296.81	19,730.00	6.75%
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44	43.11%
Technology	1,46,543.38	2,92,296.81	1,46,543.38	50.14%
Total	2,92,296.81	2,92,296.81	2,92,296.81	100.00%

➤

8.Applying filter to a particular Column:

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

```
technology profit = CALCULATE([total profit], Orders[category] = "Technology")
```
- Visualizations >Columns>technology profit

Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat	technology profit	(KP)Technology profit
Furniture	19,730.00	2,92,296.81	19,730.00	6.75%	1,46,543.38	
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44	43.11%	1,46,543.38	
Technology	1,46,543.38	2,92,296.81	1,46,543.38	50.14%	1,46,543.38	
Total	2,92,296.81	2,92,296.81	2,92,296.81	100.00%	1,46,543.38	1,46,543.38

9. Applying Keep-Filter:

Syntax: KEEPFILTERS(<Expression>)

Description: Modifies how filters are applied for evaluating.

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

(KP)Technology profit = `calculate([Total Profit], keepfilters(orders[category] = "Technology"))`

- Visualizations >Columns>(KP)Technology Profit

Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat	technology profit	(KP)Technology profit	All Profit RF filter
Furniture	19,730.00	2,92,296.81	19,730.00	6.75%	1,46,543.38		
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44	43.11%	1,46,543.38		
Technology	1,46,543.38	2,92,296.81	1,46,543.38	50.14%	1,46,543.38	1,46,543.38	
Total	2,92,296.81	2,92,296.81	2,92,296.81	100.00%	1,46,543.38	1,46,543.38	2,92,296.81

10. Applying REMOVE-Filter:

Syntax: RemoveFilter(.<column>[,...]]])

Description: same as all filter but not returns all the rows in a table or all the values in the column, ignoring any filters that have been applied. Majorly used for reducing complexity and increasing performance. This function is useful for clearing filters and creating calculations or all the rows in a table

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:

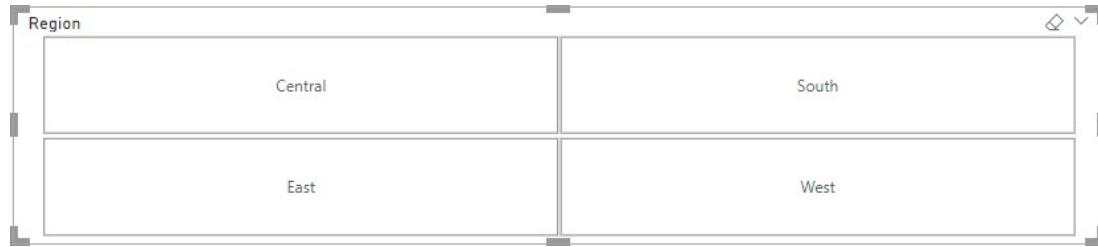
All Profit RF filter = `calculate([total profit], REMOVEFILTERS(Orders[category]))`

- Visualizations >Columns>All profit RF filter

Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat	technology profit	(KP)Technology profit	All Profit RF filter
Furniture	19,730.00	2,92,296.81	19,730.00	6.75%	1,46,543.38		2,92,296.81
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44	43.11%	1,46,543.38		2,92,296.81
Technology	1,46,543.38	2,92,296.81	1,46,543.38	50.14%	1,46,543.38	1,46,543.38	2,92,296.81
Total	2,92,296.81	2,92,296.81	2,92,296.81	100.00%	1,46,543.38	1,46,543.38	2,92,296.81

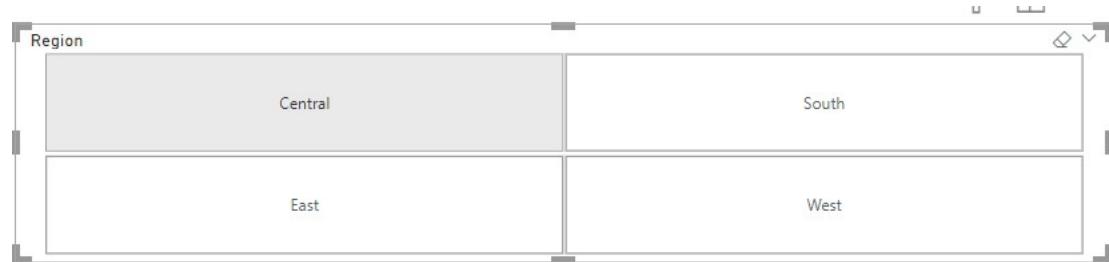
11. Creating a slicer for comparison:

- Home>visulazation>build visual>select slicer
- Chose religion in the fields
- From setting change the slicer settings>
- Choose style as tile



comparison:

if region=central

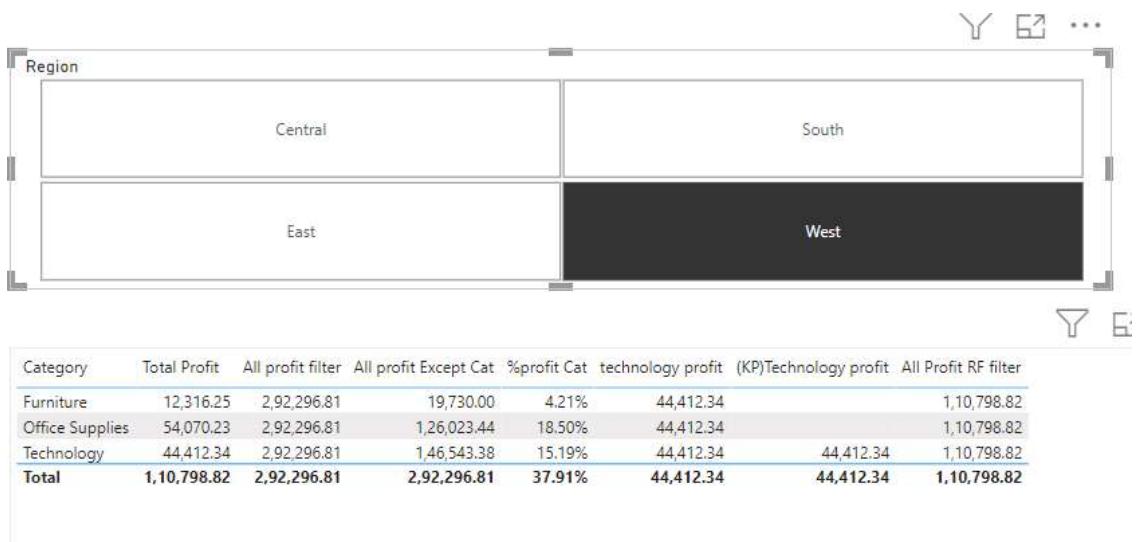


Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat	technology profit	(KP)Technology profit	All Profit RF filter
Furniture	-2,802.21	2,92,296.81	19,730.00	-0.96%	33,697.43		39,865.31
Office Supplies	8,970.08	2,92,296.81	1,26,023.44	3.07%	33,697.43		39,865.31
Technology	33,697.43	2,92,296.81	1,46,543.38	11.53%	33,697.43	33,697.43	39,865.31
Total	39,865.31	2,92,296.81	2,92,296.81	13.64%	33,697.43	33,697.43	39,865.31

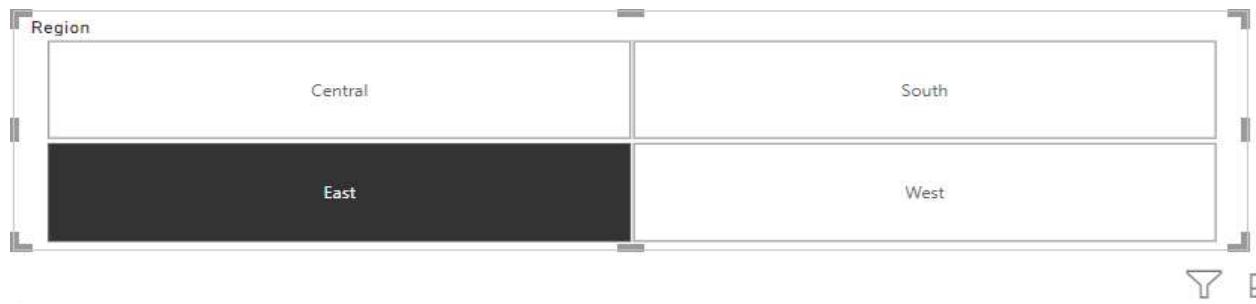
if region=south:



if region=East:



if region=West:



12. Create Table:

- Home > Enter data > Create table by giving values to the columns
- Click on new measure>and enter the below dax formula:
- Profit rank = `RANKX(ALL(Orders[region]),[total profit],,desc)`
- Visualizations >Columns>religion>profit>profit rank

Region	Sum of Profit	Profit rank
West	1,10,798.82	1
East	94,883.26	2
South	46,749.43	3
Central	39,865.31	4
Total	2,92,296.81	1

13. Output:

The screenshot displays a Microsoft Power BI report interface. On the left, there is a navigation pane with three icons: a grid, a list, and a matrix. The main area contains three visualizations:

- A treemap chart titled "Region" showing four segments: Central (top-left), South (top-right), East (bottom-left), and West (bottom-right). The segments are represented by orange rectangles of varying sizes.
- A table titled "Category" showing profit data across different categories and filters. The columns include Category, Total Profit, All profit filter, All profit Except Cat, %profit Cat, technology profit, (KP)Technology profit, and All Profit RF filter. The rows show Furniture, Office Supplies, Technology, and a Total row.
- A table titled "Region" showing the sum of profit and profit rank for each region. The columns are Region, Sum of Profit, and Profit rank. The rows show West, East, South, Central, and a Total row.

At the bottom of the report, there are navigation controls: a left arrow, a right arrow, the text "Page 1", and a green button with a white plus sign.

Category	Total Profit	All profit filter	All profit Except Cat	%profit Cat	technology profit	(KP)Technology profit	All Profit RF filter
Furniture	19,730.00	2,92,296.81	19,730.00	6.75%	1,46,543.38		2,92,296.81
Office Supplies	1,26,023.44	2,92,296.81	1,26,023.44	43.11%	1,46,543.38		2,92,296.81
Technology	1,46,543.38	2,92,296.81	1,46,543.38	50.14%	1,46,543.38	1,46,543.38	2,92,296.81
Total	2,92,296.81	2,92,296.81	2,92,296.81	100.00%	1,46,543.38	1,46,543.38	2,92,296.81

Region	Sum of Profit	Profit rank
West	1,10,798.82	1
East	94,883.26	2
South	46,749.43	3
Central	39,865.31	4
Total	2,92,296.81	1

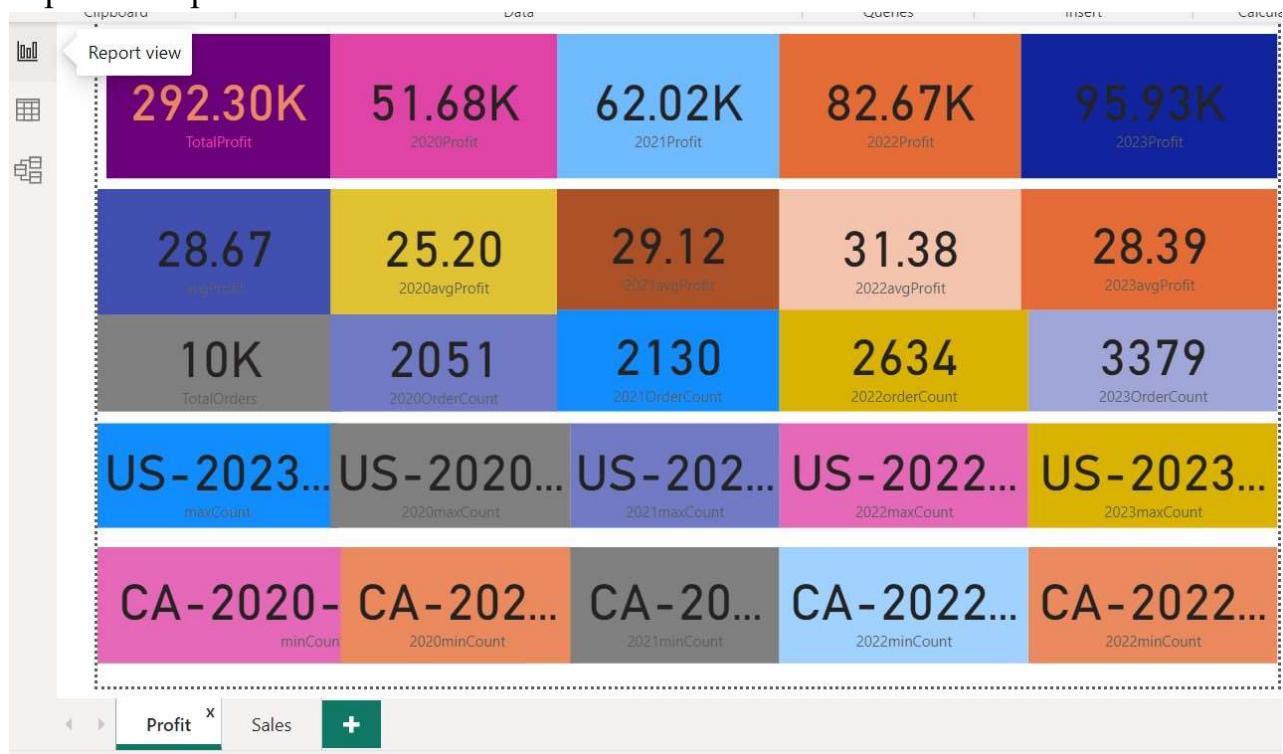
Experiment Number: 10

Aim: To publish the Power-BI project report and create a dashboard

Procedure:

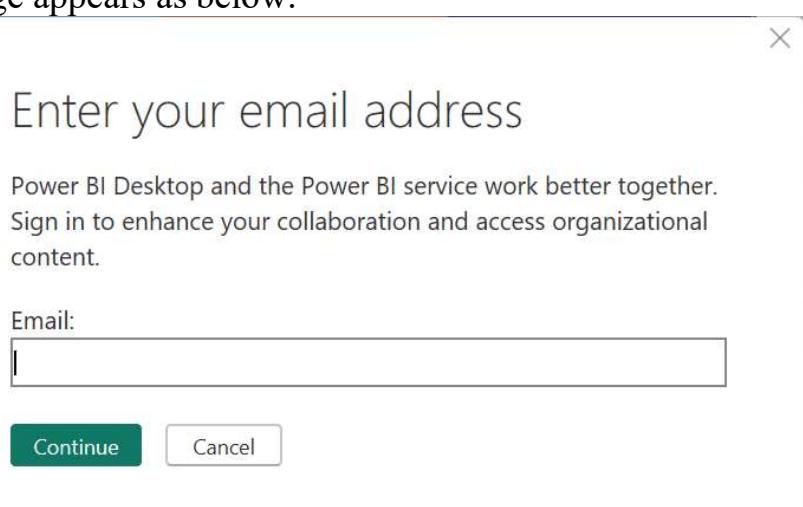
2. Open the Report View:

- Open the Power-bi file that is needed to be published
- Open the report view of the document

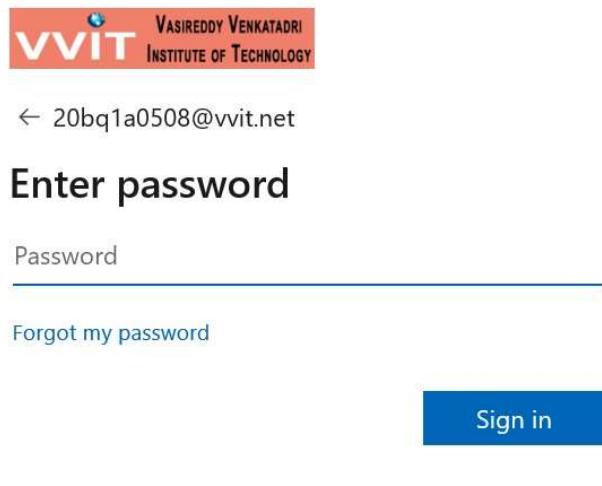


3. Sign-in to your Microsoft Account:

- On the right side of the page click on the sign in-button
- A page appears as below.



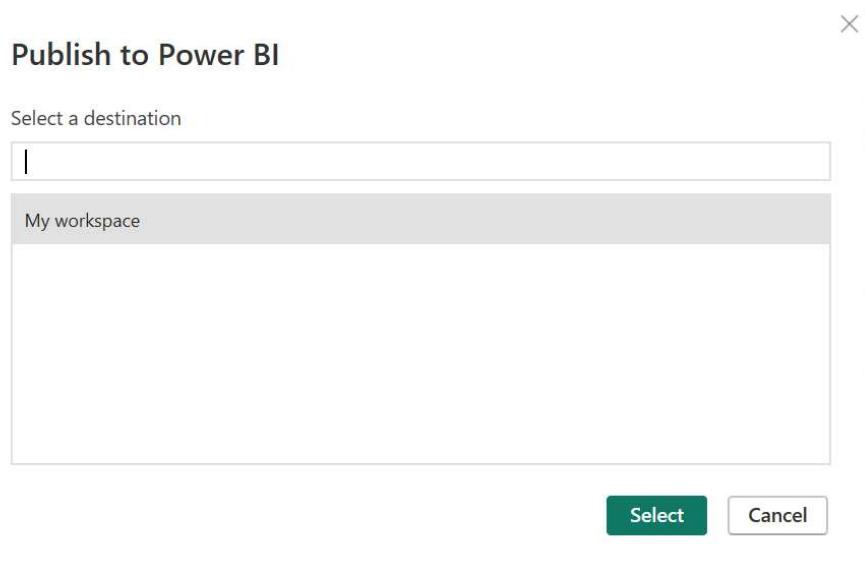
- Enter the Email or the select the email in the drop down list shown.
- A page appears as follows:



- Enter the password and click on the sign-in button
- Now,your signed-in to your Microsoft account.

4. Publish your Report:

- Click on the publish icon on the right-side of the document.
- A page appears as follows:



- Click on the My workspace from the drop-down menu
- And follow by clicking on the select button.
- A page appears as follows.

Publishing to Power BI

.. Publishing 'lab6.pbix' to Power BI



Did you know?

You can create a portrait view of your report, tailored for mobile phones.
On the **View** tab, select **Mobile Layout**. [Learn more](#)

[Cancel](#)

- After successfully publishing the report a dialog-box appears as below:

Publishing to Power BI

✓ Success!

[Open 'Lab2.pbix' in Power BI](#)

[Get Quick Insights](#)



Did you know?

You can create a portrait view of your report, tailored for mobile phones.
On the **View** tab, select **Mobile Layout**. [Learn more](#)

[Got it](#)

5. View the Report:

- Open your browser
➤ Search for App.powerbi.com
➤ A page appears as below.

The screenshot shows the Power BI Home page. On the left, there's a sidebar with icons for Home, Create, Browse, Data Lake, Apps, Metrics, Workspaces, and My Workspace. The main area has a search bar at the top. A banner at the top says "Introducing the Power BI app in Teams" with a "Learn more" link and an "Open in Teams" button. Below the banner, there's a "+ New report" button and a "New items saved to: My workspace" message. The "Recommended" section features four cards: "Getting started with Power BI" (Explore basic Power BI concepts), "Explore this data story" (Explore the 100 most useful productivity tips), "Explore this data story" (Cancer statistics in the USA), and "Getting started with" (Intro—What is Power BI?).

- Sign in to your Microsoft account.
➤ Click on the My Workspace icon that is viewed on the left-side of the page.

- The documents you have published can be viewed on this page

The screenshot shows the 'My workspace' section of the Power BI service. At the top, there are buttons for '+ New', 'Upload', 'Workspace settings', a search bar 'Filter by keyword', a 'Filter' dropdown, and a three-dot menu. Below this is a table with columns: Name, Type, Owner, Refreshed, and Next refresh. The table lists five items:

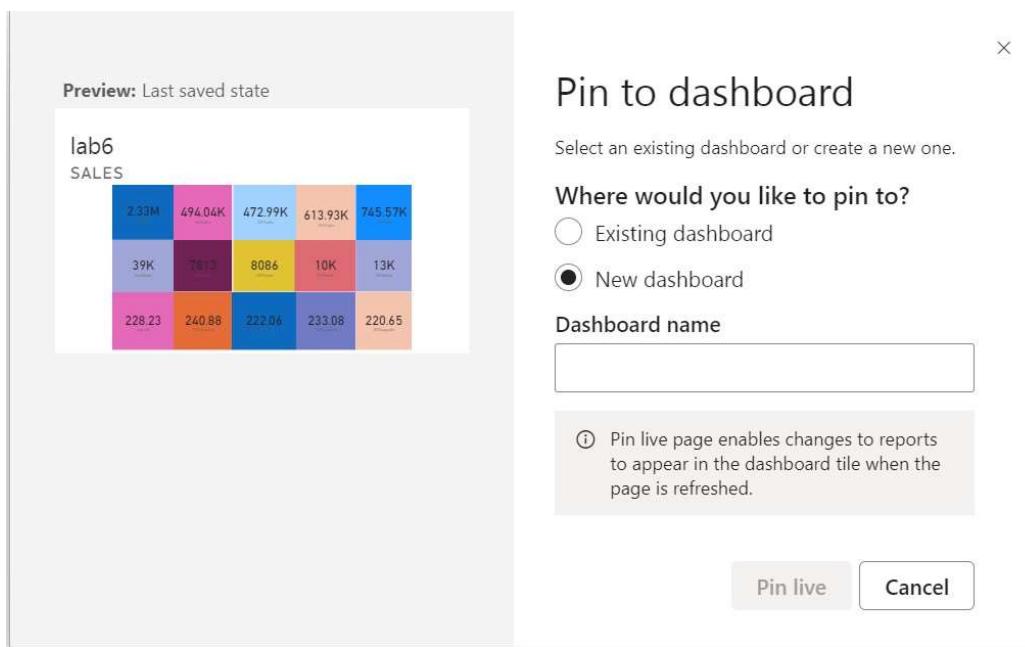
Name	Type	Owner	Refreshed	Next refresh
lab6	Report	20BQ1A0508 - ANA...	8/10/23, 11:00:34 am	—
lab6	Dataset	20BQ1A0508 - ANA...	8/10/23, 11:00:34 am	N/A
lab8	Report	20BQ1A0508 - ANA...	5/10/23, 10:19:04 am	—
lab8	Dataset	20BQ1A0508 - ANA...	5/10/23, 10:19:04 am	N/A
MTD,QTD,YTD Formulas	Dashboard	20BQ1A0508 - ANA...	—	—

6. Pin To Dashboard:

- We can also create dashboards for all the important data that is needed to view more oftenly.
- For Example there are 2 pages in the report we have published i.e. profit and sales.
- So if we need to view sales page often we can create a dashboard for it.
- Open the page and click on the three dots that are visible on the right side of the page
- The page appears as below.



- Click on the pin to a dashboard option.
- Two options are shown as below:



- We can pin it to new dashboard or an existing dashboard.
- Give a suitable dashboard name
- After clicking on pin-live the pinned page will be shown as follows.



- Similarly publish all the power-bi files that have been done.

7.Final Report:

- After publishing all the documents, open the browser.
- Sign in to your account
- Click on My Workspaces.
- Along with the published documents the pinned reports will be shown on your dashboard.

8.Final Output:

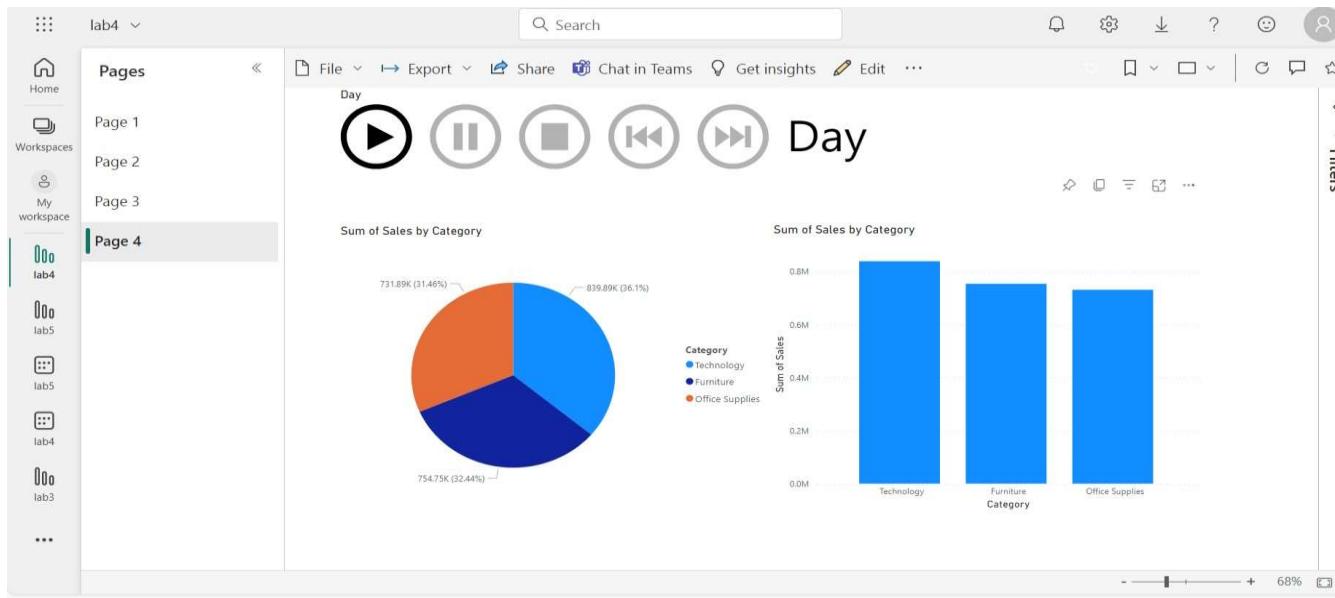
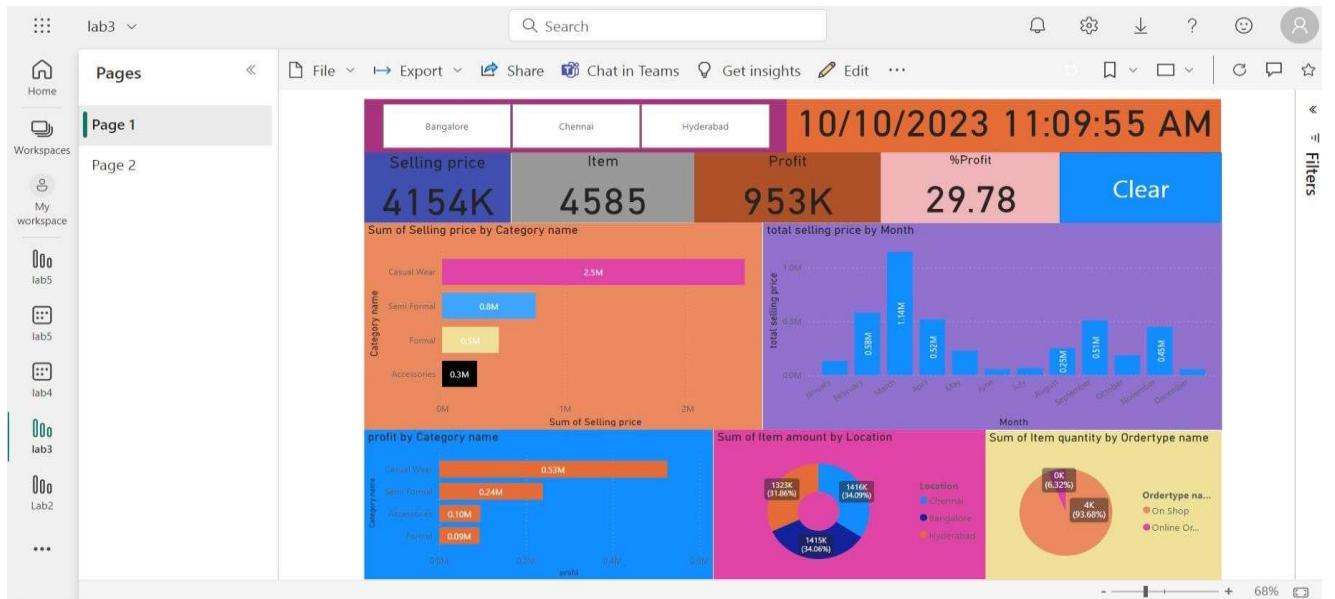
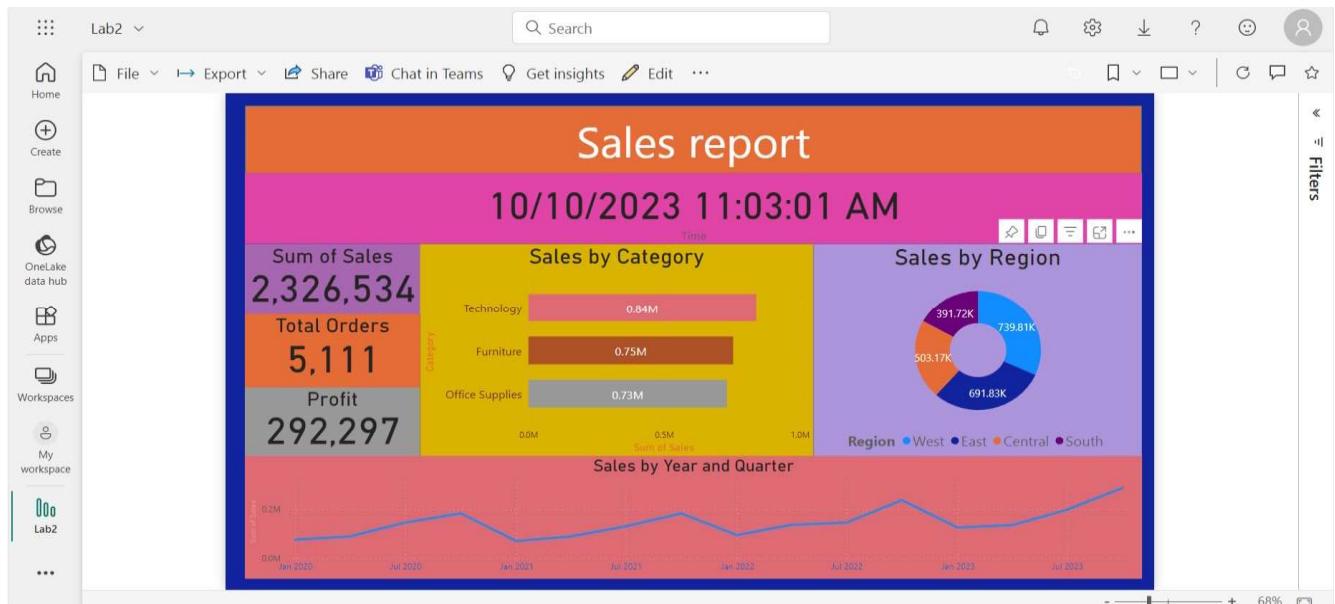
The pinned pages will be appeared as below in the dashboard

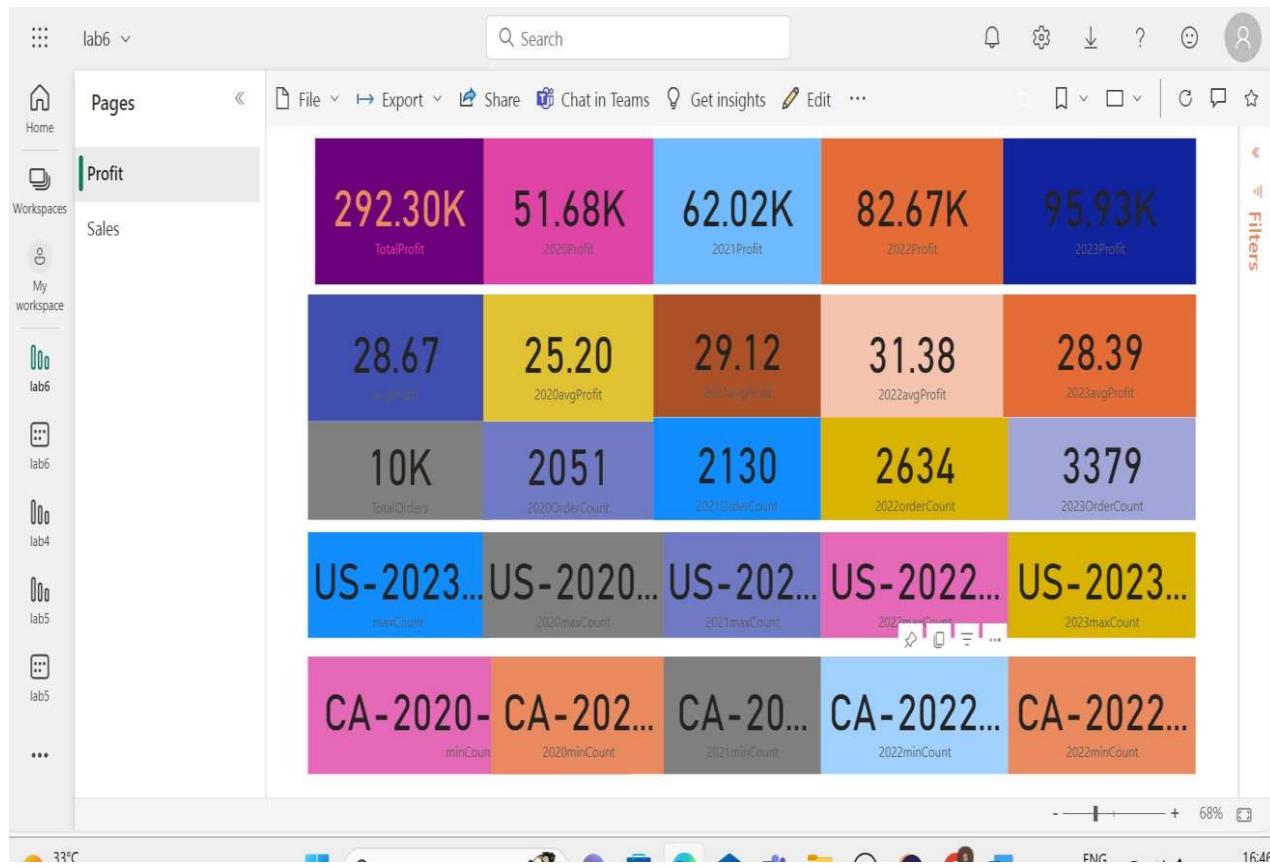
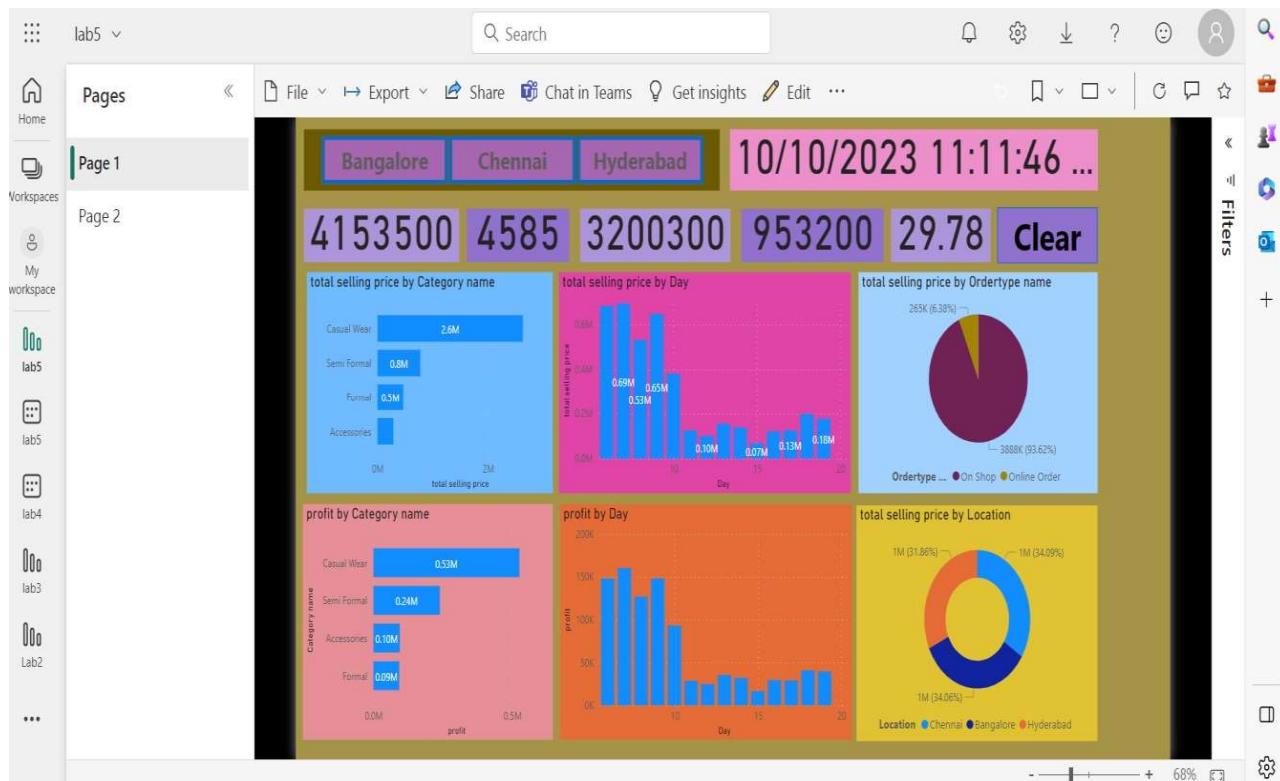
	Name	Type	Opened	Owner	Enc
⌚	Advanced Visualizations	Dashboard		20BQ1A0508 - ANA...	—
⌚	Extracting Transformations	Dashboard		20BQ1A0508 - ANA...	—
⌚	profit	Dashboard		20BQ1A0508 - ANA...	—
⌚	sales report	Dashboard	a minute ago	20BQ1A0508 - ANA...	—
⌚	Sameperiodlastyear	Dashboard	2 minutes ago	20BQ1A0508 - ANA...	—
⌚	Sales	Dashboard	19 minutes ago	20BQ1A0508 - ANA...	—
⌚	MTD,QTD,YTD Formulas	Dashboard	3 days ago	20BQ1A0508 - ANA...	—

All the reports you have published will be shown in workspace as shown below:

The screenshot shows the 'My workspace' page in Power BI. The left sidebar lists workspaces: Home, My workspace (selected), Sales report, Lab2, lab8, Sales, lab6, and three ellipsis (...). The main area has a header with 'Power BI My workspace', a search bar, and various navigation icons. Below the header is a toolbar with '+ New', 'Upload', 'Workspace settings', 'Filter by keyword', 'Filter', and other icons. The main content is a table listing items:

	Name	Type	Owner	Refreshed	Next refresh	Enc
⌚	Lab2	Report	20BQ1A0508 - ANA...	8/10/23, 11:17:33 am	—	—
⌚	Lab2	Dataset	20BQ1A0508 - ANA...	8/10/23, 11:17:33 am	N/A	—
⌚	lab3	Report	20BQ1A0508 - ANA...	8/10/23, 11:16:41 am	—	—
⌚	lab3	Dataset	20BQ1A0508 - ANA...	8/10/23, 11:16:41 am	N/A	—
⌚	lab4	Report	20BQ1A0508 - ANA...	8/10/23, 11:15:49 am	—	—
⌚	lab4	Dataset	20BQ1A0508 - ANA...	8/10/23, 11:15:49 am	N/A	—
⌚	lab6	Report	20BQ1A0508 - ANA...	8/10/23, 11:00:34 am	—	—





lab7

Pages

File Export Share Chat in Teams Get insights Edit ...

Sum of Profit by Day

Sum of Profit by Month

Sum of Profit by MonthName

Sum of Profit by Quarter

Sum of Profit by QuarterName

Sum of Profit by WeekNum

Sum of Profit by WeekDay

Sum of Profit by Day of weekName

Sum of Profit by year

Year Quarter Month Day Sum of Profit previousDayProfit

2020 Qtr 1 January 3	5.55
2020 Qtr 1 January 4	-65.99
2020 Qtr 1 January 5	4.88
2020 Qtr 1 January 6	1,358.05
2020 Qtr 1 January 7	4.88
2020 Qtr 1 January 8	-71.96
Total	292,296.81

Year Quarter Month Sum of Profit previousMonthProfit

2020 Qtr 1 January	2,539.39
2020 Qtr 1 February	862.31
2020 Qtr 1 March	693.45
2020 Qtr 2 April	3,488.84
2020 Qtr 2 May	3,196.39
Total	292,296.81

68%

lab8

File Export Share Chat in Teams Get insights Edit ...

Year	Quarter	Month	Day	Sum of Quantity	Mtd item qt
2020	Qtr 1	January	3	2	2
2020	Qtr 1	January	4	8	10
2020	Qtr 1	January	5	3	13
2020	Qtr 1	January	6	30	43
2020	Qtr 1	January	7	10	53
2020	Qtr 1	January	8	53	53
2020	Qtr 1	January	9	5	58
2020	Qtr 1	January	10	2	60
2020	Qtr 1	January	11	2	62
2020	Qtr 1	January	12	62	62
2020	Qtr 1	January	13	48	110
2020	Qtr 1	January	14	4	114
Total				38654	1820

Year	Quarter	Month	Day	Sum of Quantity	qtd item qt
2020	Qtr 1	January	3	306	30
2020	Qtr 1	February	10	159	46
2020	Qtr 1	March	13	597	106
2020	Qtr 2	April	53	536	53
2020	Qtr 2	May	104	504	104
2020	Qtr 2	June	156	524	156
2020	Qtr 3	July	55	550	55
2020	Qtr 3	August	117	624	117
2020	Qtr 3	September	218	1015	218
2020	Qtr 4	October	60	605	60
2020	Qtr 4	November	184	1235	184
2020	Qtr 4	December	299	1158	299
Total				38654	482

Year	Quarter	Month	Day	Sum of Profit	Mtd profit
2020	Qtr 1	January	3	5.55	5.55
2020	Qtr 1	January	4	-65.99	-65.99
2020	Qtr 1	January	5	4.88	4.88
2020	Qtr 1	January	6	1,358.05	1,358.05
2020	Qtr 1	January	7	-71.96	-71.96
2020	Qtr 1	January	8	1	1
2020	Qtr 1	January	9	10.92	10.92
2020	Qtr 1	January	10	22.65	22.65
2020	Qtr 1	January	11	3.08	3.08
2020	Qtr 1	January	12	1	1
2020	Qtr 1	January	13	673.64	673.64
2020	Qtr 1	January	14	-53.29	-53.29
2020	Qtr 1	January	15	65.98	65.98
2020	Qtr 1	January	16	-5.93	-5.93
Total				292,296.81	8,1

Year	Quarter	Month	Day	Sum of Profit	MTDprofit
2020	Qtr 1	January	3	2,539.39	2,539.39
2020	Qtr 1	February	10	862.31	3,401.70
2020	Qtr 1	March	13	693.45	4,095.15
2020	Qtr 2	April	53	135	4,095.15
2020	Qtr 2	May	104	132	267
2020	Qtr 2	June	156	136	403
2020	Qtr 3	July	55	143	143
2020	Qtr 3	August	117	158	301
2020	Qtr 3	September	218	273	574
2020	Qtr 4	October	60	168	168
2020	Qtr 4	November	184	320	488
2020	Qtr 4	December	299	297	785
Total				482	1251

Year	Quarter	Month	Day	Sum of Profit	QTDprofit
2020	Qtr 1	January	1	2,539.39	2,539.39
2020	Qtr 1	February	10	862.31	3,401.70
2020	Qtr 1	March	13	693.45	4,095.15
2020	Qtr 2	April	53	135	4,095.15
2020	Qtr 2	May	104	132	267
2020	Qtr 2	June	156	136	403
2020	Qtr 3	July	55	143	143
2020	Qtr 3	August	117	158	301
2020	Qtr 3	September	218	273	574
2020	Qtr 4	October	60	168	168
2020	Qtr 4	November	184	320	488
2020	Qtr 4	December	299	297	785
Total				482	1251

Year	Quarter	Month	Day	Sum of Profit	YTDprofit
2020	Qtr 1	January	1	2,539.39	2,539.39
2020	Qtr 1	February	10	862.31	3,401.70
2020	Qtr 1	March	13	693.45	4,095.15
2020	Qtr 2	April	53	135	4,095.15
2020	Qtr 2	May	104	132	267
2020	Qtr 2	June	156	136	403
2020	Qtr 3	July	55	143	143
2020	Qtr 3	August	117	158	301
2020	Qtr 3	September	218	273	574
2020	Qtr 4	October	60	168	168
2020	Qtr 4	November	184	320	488
2020	Qtr 4	December	299	297	785
Total				482	1251

68%