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".

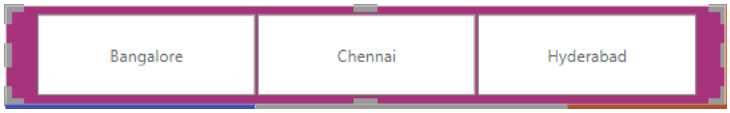
Output:

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:

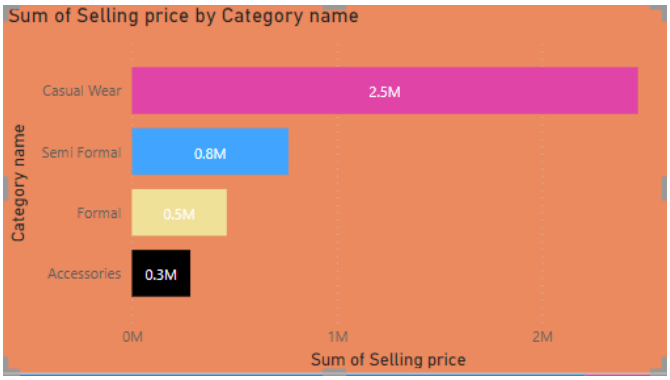
- With the card visualization selected, locate the "Fields" pane on the right-hand side.
- Right-click anywhere in the "Fields" pane and select "New Measure" from the contextmenu. This will open the formula bar at the top.
- In the formula bar, enter the following DAX formula to create a measure that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

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:

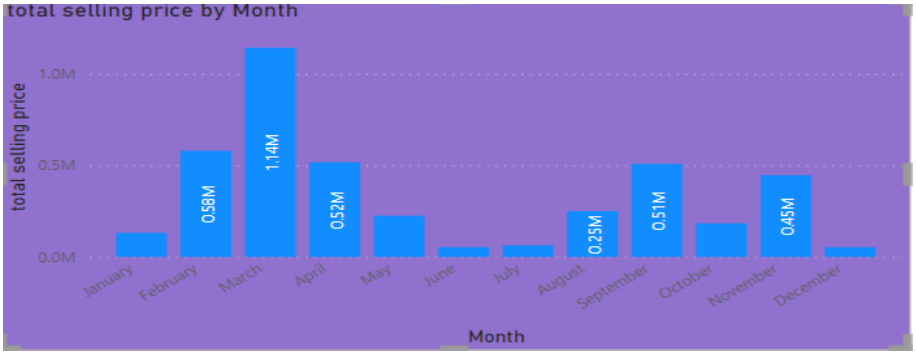


6. Create Stacked Column Chart:

- 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 calculatesthe total selling price**:**
    - total selling price = SUMX(Data,Data[Selling 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:

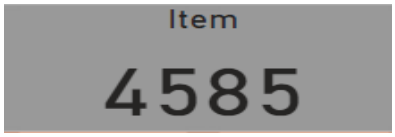
8. Create a Card to display Total Item Count:

- 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

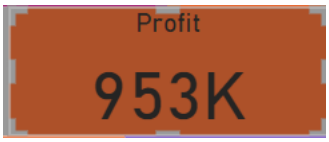
Output:



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:

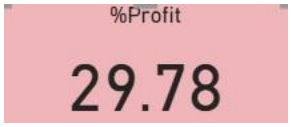


10. Create a Card to display Profit %:

- 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

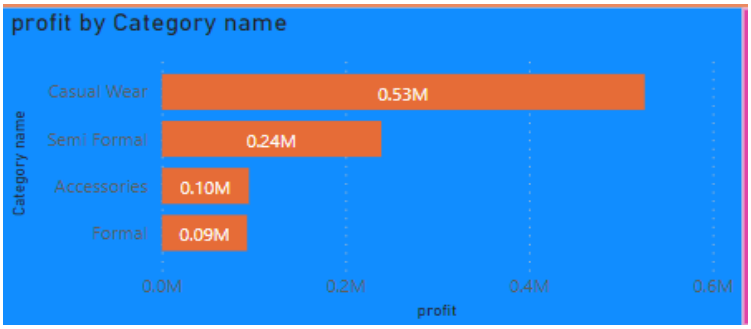
Output:



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>Banglore >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

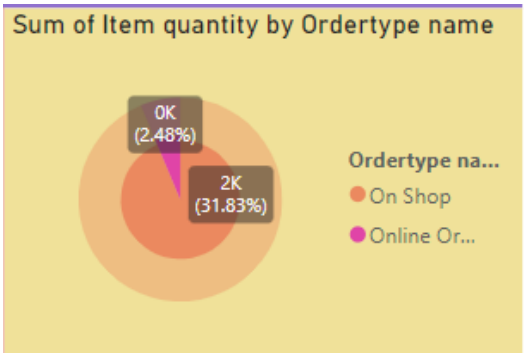
Output:

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 quantiy by ordertype name”
- Visualizations >Format Visuals> Title> Font Size =16
- Visualizations >Format Visuals> Effects> Background Color = #FFD86C

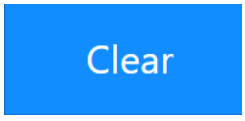
Output:



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:



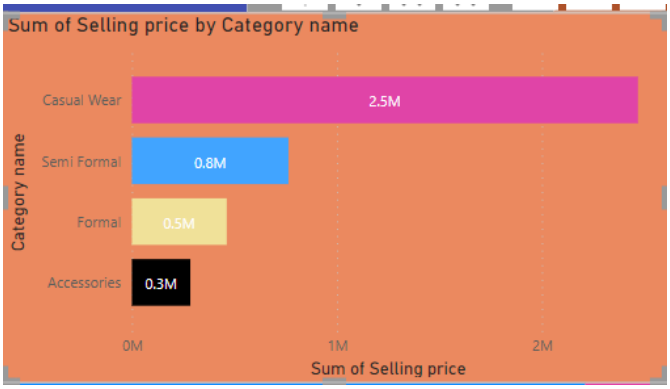
15. Creating Hierarchy for drill down and drill up operations:

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

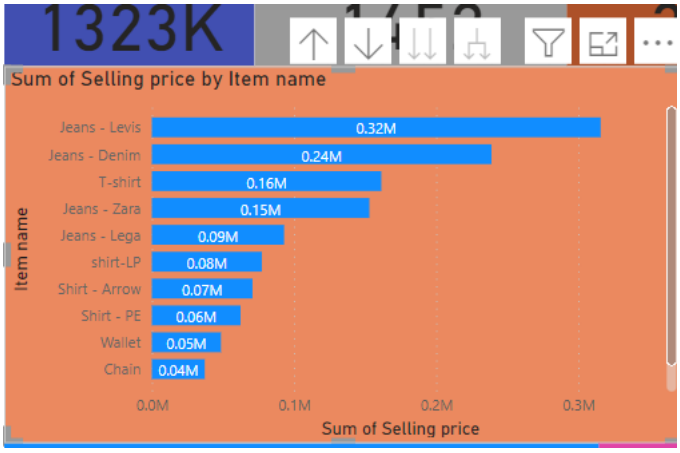
- Place cursor on visual > Click " ↓ " to drill down
- Place cursor on visual > Click " ⇓ " to drill next level of hierarachy

Output:

Initial:

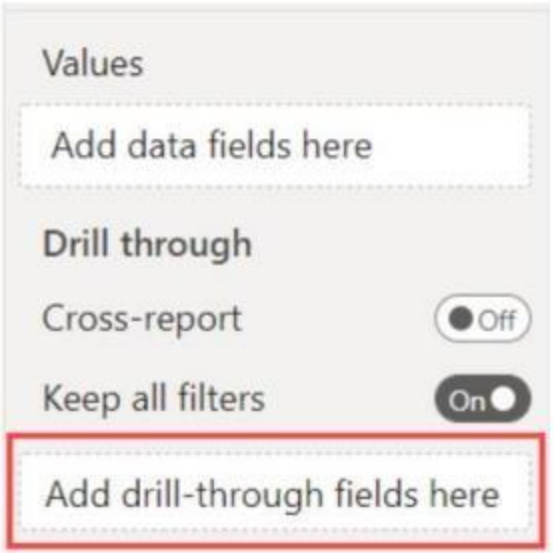


After Drill Down:



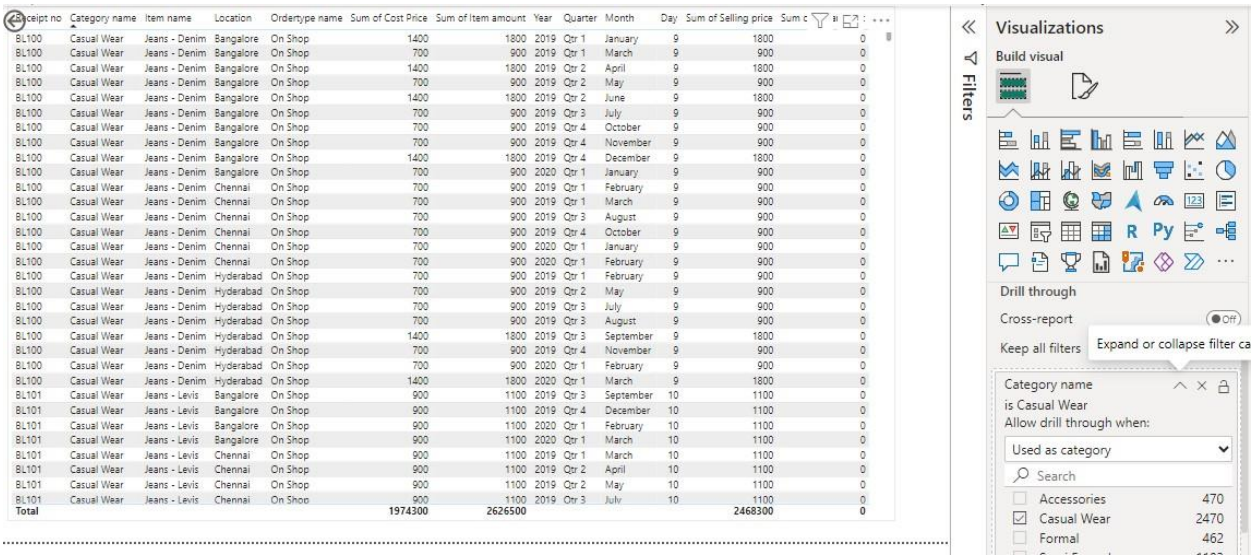
Drill through:

- 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:

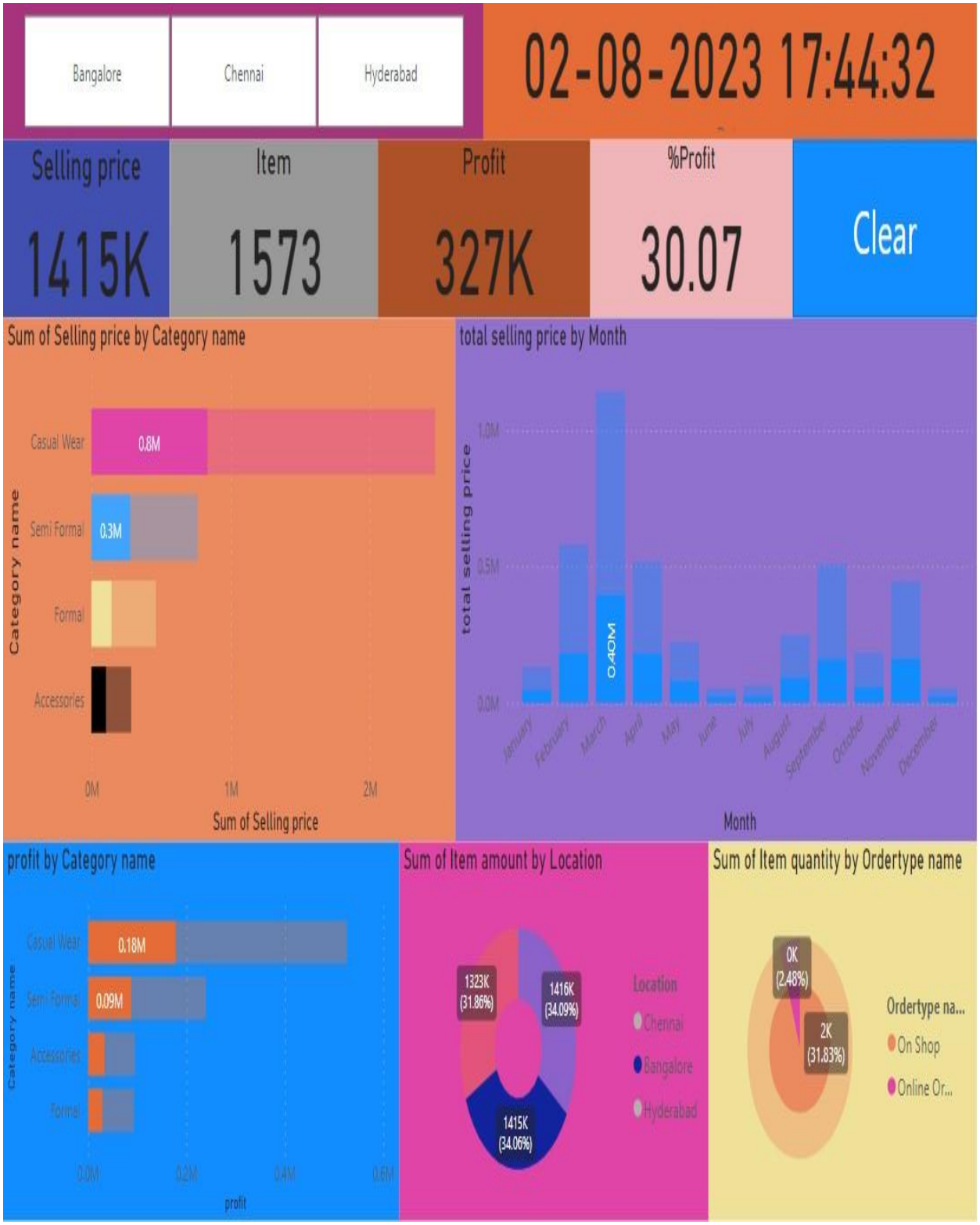


ceipt no	Category name	Item name	Location	Ordertype name	Sum of Cost Price	Sum of Item amount	Year	Quarter	Month	Day	Sum of Selling price	Sum c
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	1400	1800	2019	Qtr 1	January	9	1800	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2019	Qtr 1	March	9	900	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	1400	1800	2019	Qtr 2	April	9	1800	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2019	Qtr 2	May	9	900	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	1400	1800	2019	Qtr 2	June	9	1800	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2019	Qtr 3	July	9	900	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2019	Qtr 4	October	9	900	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2019	Qtr 4	November	9	900	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	1400	1800	2019	Qtr 4	December	9	1800	0
BL100	Casual Wear	Jeans - Denim	Bangalore	On Shop	700	900	2020	Qtr 1	January	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2019	Qtr 1	February	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2019	Qtr 1	March	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2019	Qtr 3	August	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2019	Qtr 4	October	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2020	Qtr 1	January	9	900	0
BL100	Casual Wear	Jeans - Denim	Chennai	On Shop	700	900	2020	Qtr 1	February	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2019	Qtr 1	February	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2019	Qtr 2	May	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2019	Qtr 3	July	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2019	Qtr 3	August	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	1400	1800	2019	Qtr 3	September	9	1800	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2019	Qtr 4	November	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	700	900	2020	Qtr 1	February	9	900	0
BL100	Casual Wear	Jeans - Denim	Hyderabad	On Shop	1400	1800	2020	Qtr 1	March	9	1800	0
BL101	Casual Wear	Jeans - Levis	Bangalore	On Shop	900	1100	2019	Qtr 3	September	10	1100	0
BL101	Casual Wear	Jeans - Levis	Bangalore	On Shop	900	1100	2019	Qtr 4	December	10	1100	0
BL101	Casual Wear	Jeans - Levis	Bangalore	On Shop	900	1100	2020	Qtr 1	February	10	1100	0
BL101	Casual Wear	Jeans - Levis	Bangalore	On Shop	900	1100	2020	Qtr 1	March	10	1100	0
BL101	Casual Wear	Jeans - Levis	Chennai	On Shop	900	1100	2019	Qtr 1	March	10	1100	0
BL101	Casual Wear	Jeans - Levis	Chennai	On Shop	900	1100	2019	Qtr 2	April	10	1100	0
BL101	Casual Wear	Jeans - Levis	Chennai	On Shop	900	1100	2019	Qtr 2	May	10	1100	0
BL101	Casual Wear	Jeans - Levis	Chennai	On Shop	900	1100	2019	Qtr 3	July	10	1100	0
Total					1974300	2626500					2468300	0

16. Final Visual Format:

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

Output:


Bangalore
Chennai
Hyderabad
02-08-2023 17:44:32
Selling price
1415K
Item
1573
Profit
327K
%Profit
30.07
Clear
Sum of Selling price by Category name
Casual Wear
0.8M
Semi Formal
0.3M
Formal
Accessories
Category name
0M
1M
2M
Sum of Selling price
total selling price by Month
1.0M
0.5M
0.0M
total selling price
0.40M
January
February
March
April
May
June
July
August
September
October
November
December
Month
profit by Category name
Casual Wear
0.18M
Semi Formal
0.09M
Accessories
Formal
Category name
0.0M
0.2M
0.4M
0.6M
profit
Sum of Item amount by Location
1323K
(31.86%)
1416K
(34.09%)
1415K
(34.06%)
Location
Chennai
Bangalore
Hyderabad
Sum of Item quantity by Ordertype name
0K
(2.48%)
2K
(31.83%)
Ordertype na...
On Shop
Online Or...