

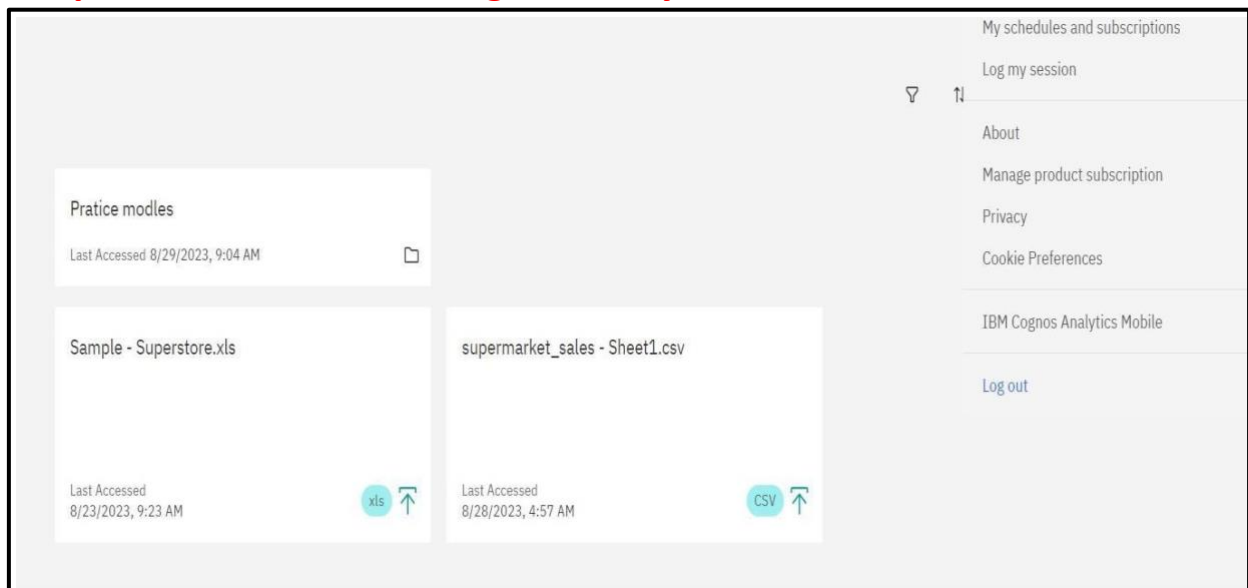
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**REGD.NO:21BCE9551**

**IBM Cognos Analytics**

**ASSIGNMENT-1**

**Upload the dataset to Cognos Analytics:**



**1. Delete the unnecessary columns:**

**In the above data set Invoice Id and Gross margin percentage columns are removed as they are not useful for analytics.**

This screenshot shows the 'Data module' view in IBM Cognos Analytics. The left sidebar displays a tree structure for 'supermark...heet1.csv' with fields like Time category, Row Id, Branch, City, Customer type, Gender, Product line, Unit price, Quantity, and Tax 5%. The main grid view shows a table with the following columns: Branch, City, Customer type, Gender, and Product line. The data rows are as follows:

Branch	City	Customer type	Gender	Product line
A	Yangon	Member	Female	Health and bea
C	Naypyitaw	Normal	Female	Electronic acce
A	Yangon	Normal	Male	Home and lifes
A	Yangon	Member	Male	Health and bea
A	Yangon	Normal	Male	Sports and trav
C	Naypyitaw	Normal	Male	Electronic acce
A	Yangon	Member	Female	Electronic acce
C	Naypyitaw	Normal	Female	Home and lifes
A	Yangon	Member	Female	Health and bea
B	Mandalay	Member	Female	Food and bever

**Time column is split into Hour column and Date column is split into Year, Month, Date, Day of the week.**

This screenshot shows the 'Data module' view in IBM Cognos Analytics with the 'Time' column expanded. The left sidebar shows a tree structure for 'Assignment-1Mod' with fields like Q..., T..., T..., Date, Year, Month, Day, Day of the week, Time, Hour, P..., g..., and R... The main grid view shows a table with the following columns: Year, Month, Day, Day of the week, Time, and Hour. The data rows are as follows:

Year	Month	Day	Day of the week	Time	Hour
2019	1	5	Saturday	13:08:00	13
2019	3	8	Friday	10:29:00	10
2019	3	3	Sunday	13:23:00	13
2019	1	27	Sunday	20:33:00	20
2019	2	8	Friday	10:37:00	10
2019	3	25	Monday	18:30:00	18
2019	2	25	Monday	14:36:00	14
2019	2	24	Sunday	11:38:00	11
2019	1	10	Thursday	17:15:00	17
2019	2	20	Wednesday	13:27:00	13

## A Calculated column Time category is added on the basis of Hour column

The screenshot shows the 'Edit calculation' window in IBM Cognos Analytics. The 'Name' field is set to 'Time category'. The 'Expression' field contains a CASE statement that categorizes hours into Morning, Noon, or Night. The 'Components' pane on the left lists available fields from the 'supermarket\_sales\_Sheet1.csv' source, including 'Time category', 'Row Id', 'Branch', 'City', 'Customer type', 'Gender', 'Product line', 'Unit price', 'Quantity', and 'Tax 5%'. The 'Preview' section shows the results of the calculation for two rows.

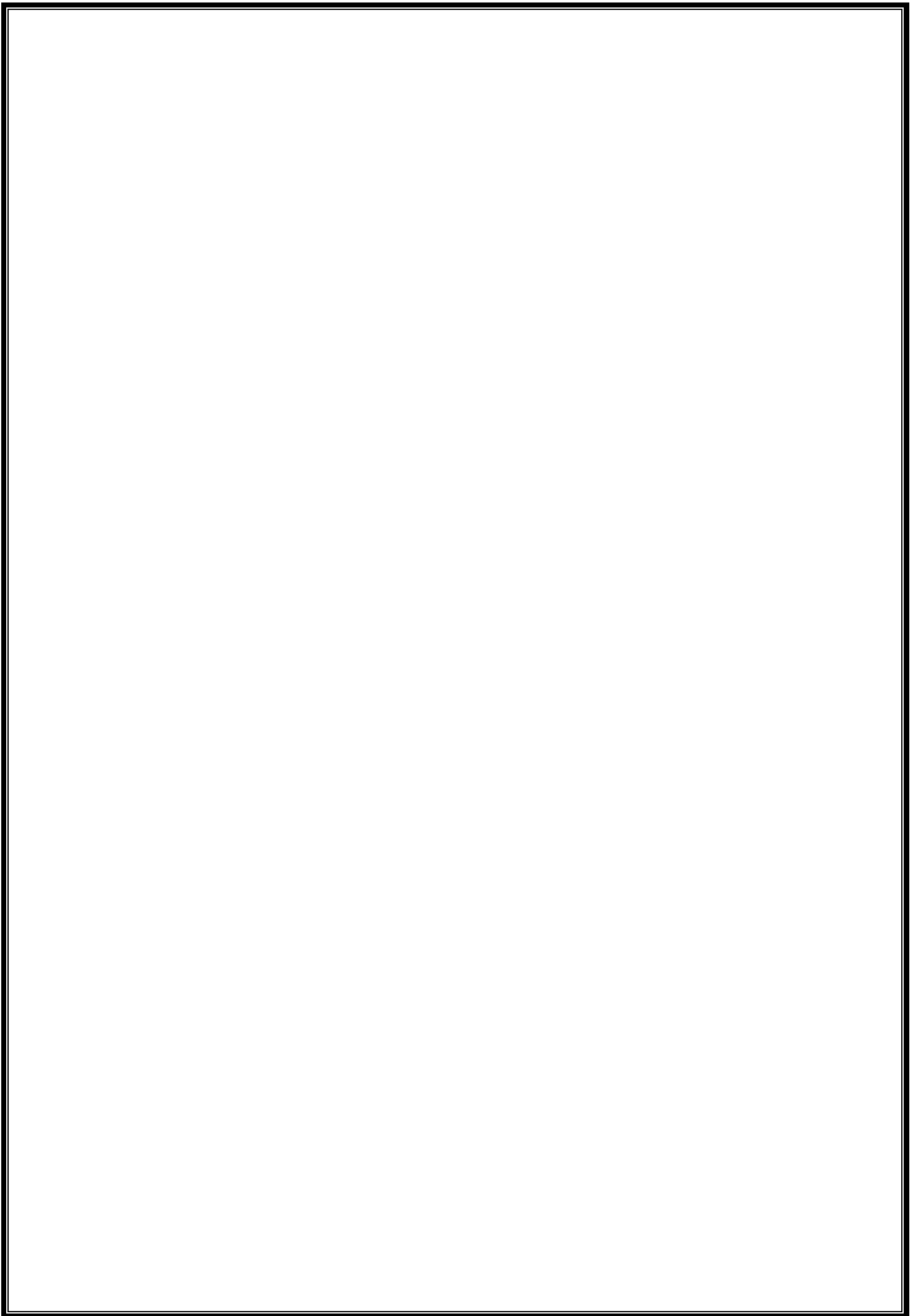
```
6 // END
7
8 CASE
9   WHEN [supermarket_sales_Sheet1.csv.Hour_] >= '8' AND [supermarket_sales_Sheet1.csv.Hour_] <
    '11' THEN 'Morning'
10  WHEN [supermarket_sales_Sheet1.csv.Hour_] >= '11' AND [supermarket_sales_Sheet1.csv.Hour_] <
    '18' THEN 'Noon'
11  WHEN [supermarket_sales_Sheet1.csv.Hour_] >= '18' AND [supermarket_sales_Sheet1.csv.Hour_] <
    '22' THEN 'Night'
12  ELSE NULL
13 END
14
```

Time category	Hour
Noon	13
Morning	10

### 3. Create A Data Module

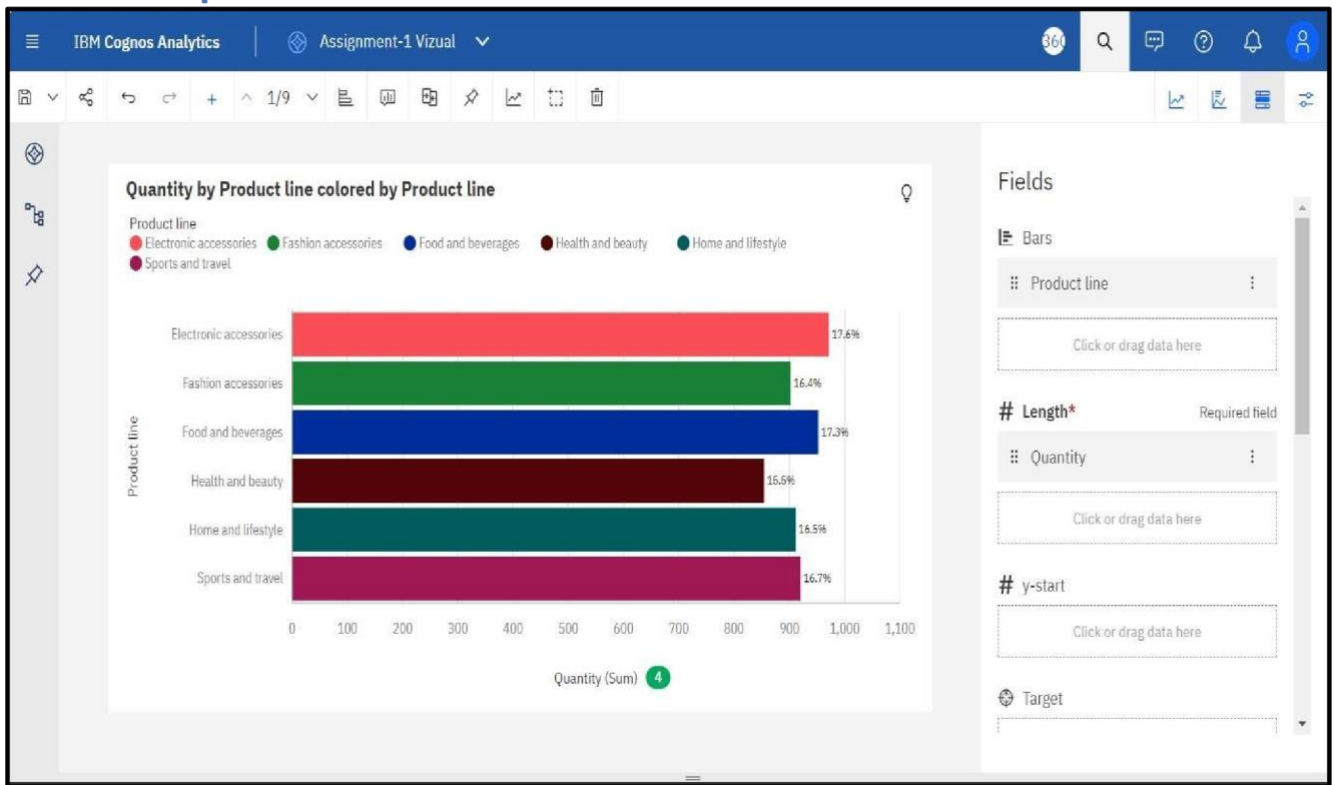
The screenshot shows the 'Save as' dialog in IBM Cognos Analytics. The 'Selected destination' is 'Pratice modles'. The 'My content' tab is active, showing a list of existing content items. The 'Properties' pane on the right shows the 'Gender' property with a list of values: Female, Male, and Female.

Name	Type	Last Accessed
Assignment-1 Vizual	Exploration	8/30/2023, 12:34 AM
Assignment-1Mod	Data module	8/30/2023, 12:43 AM
SSDMod	Data module	8/28/2023, 4:28 AM
SSDmod dashboard	Dashboard	8/29/2023, 8:53 AM

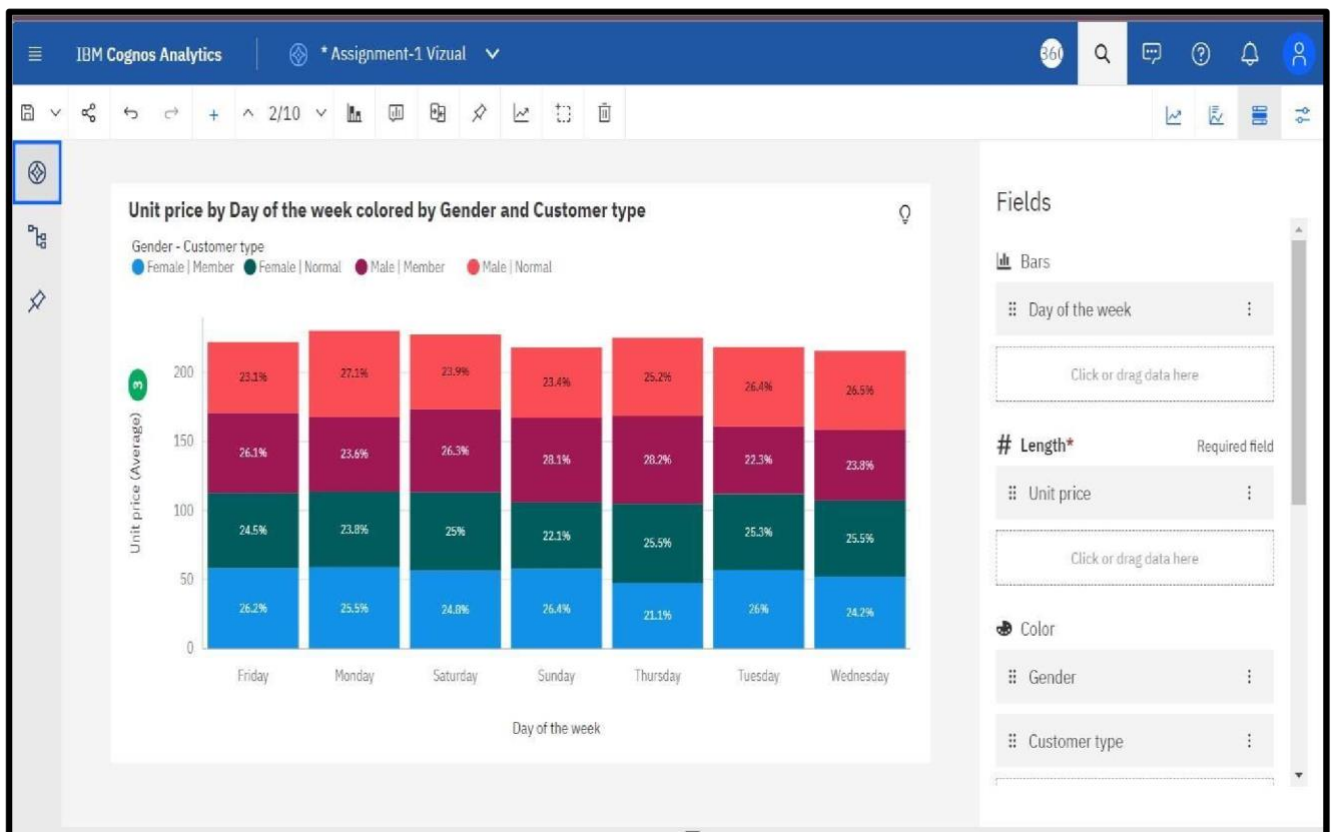


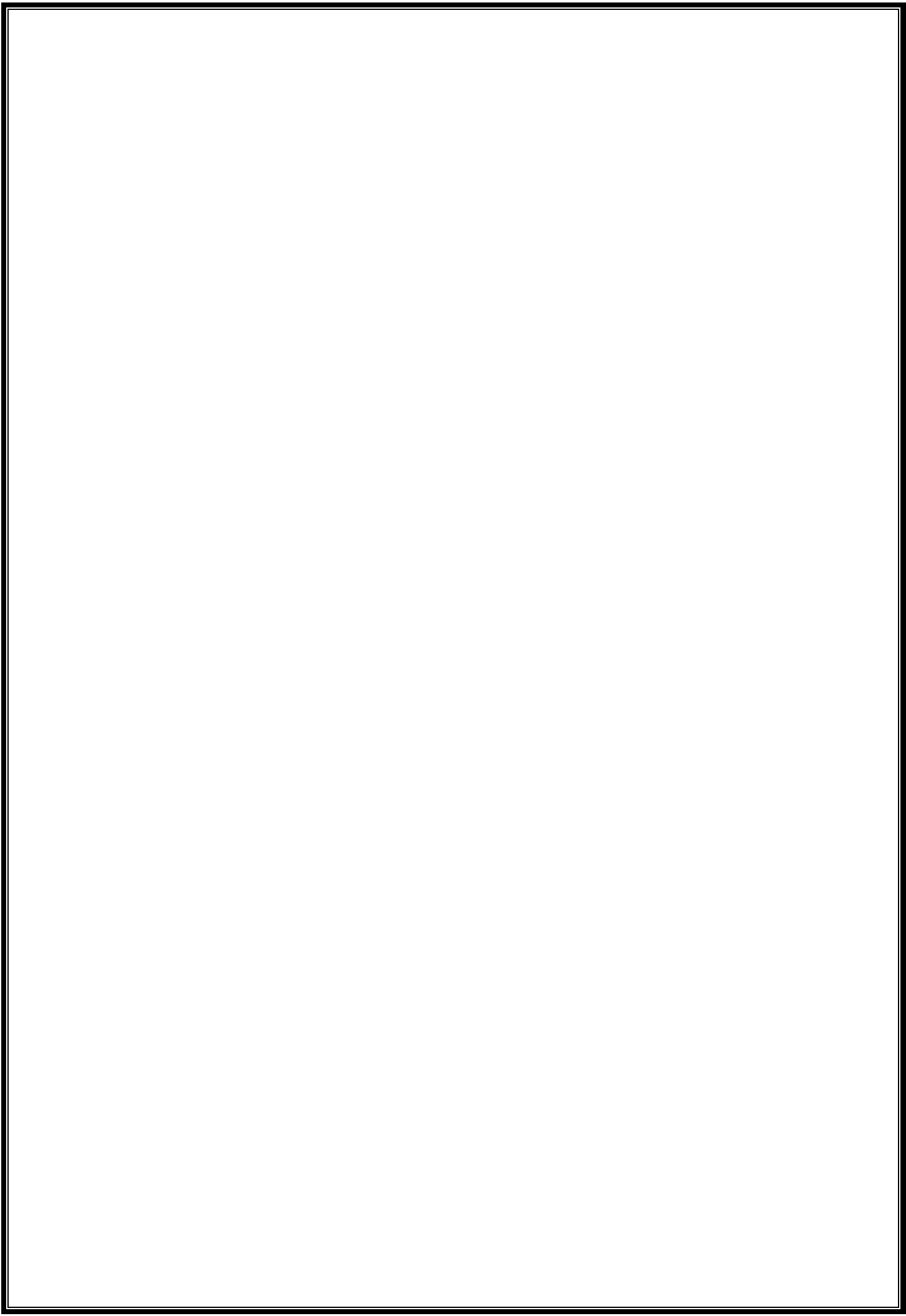
## 4. Explore And Visualize The Dataset

### 1. Bar Graph:

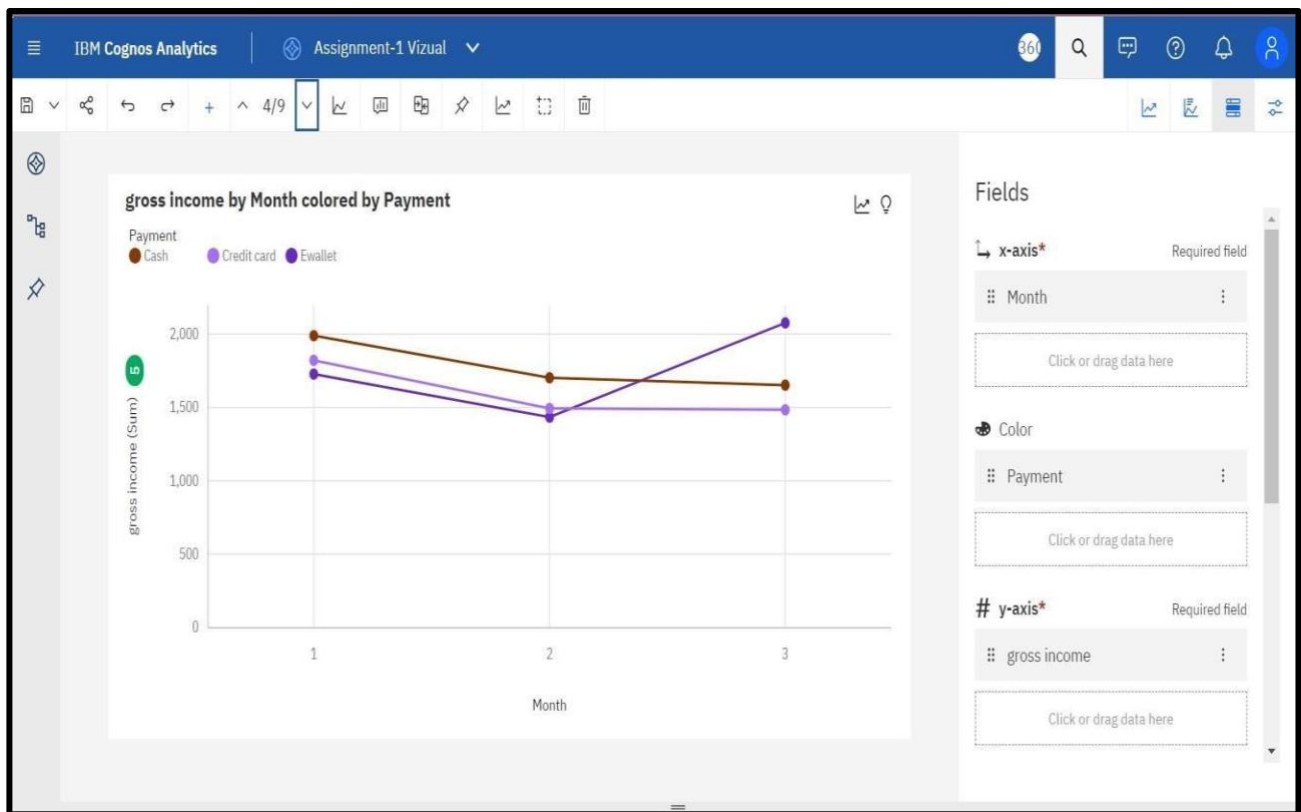


### 2. Stacked Column chart:

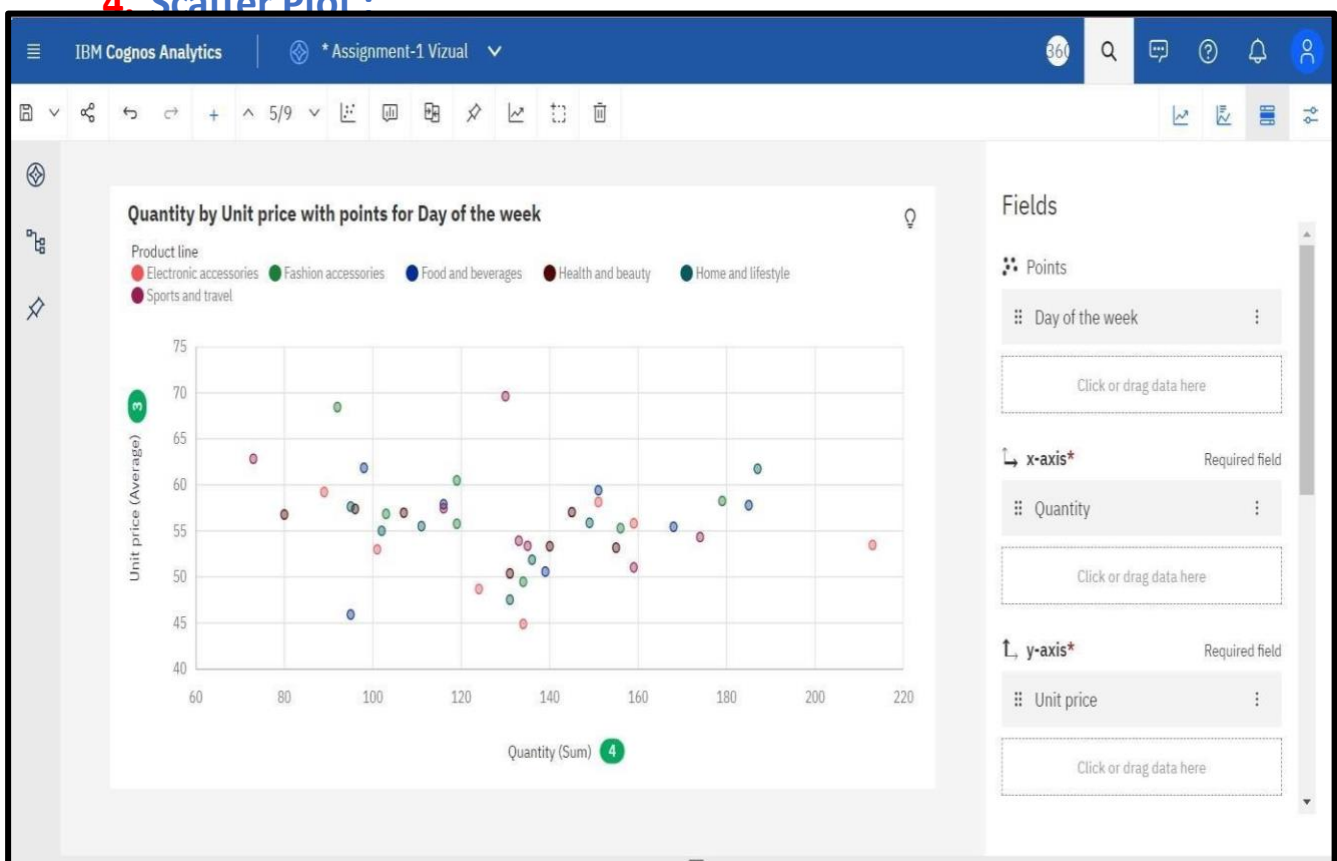


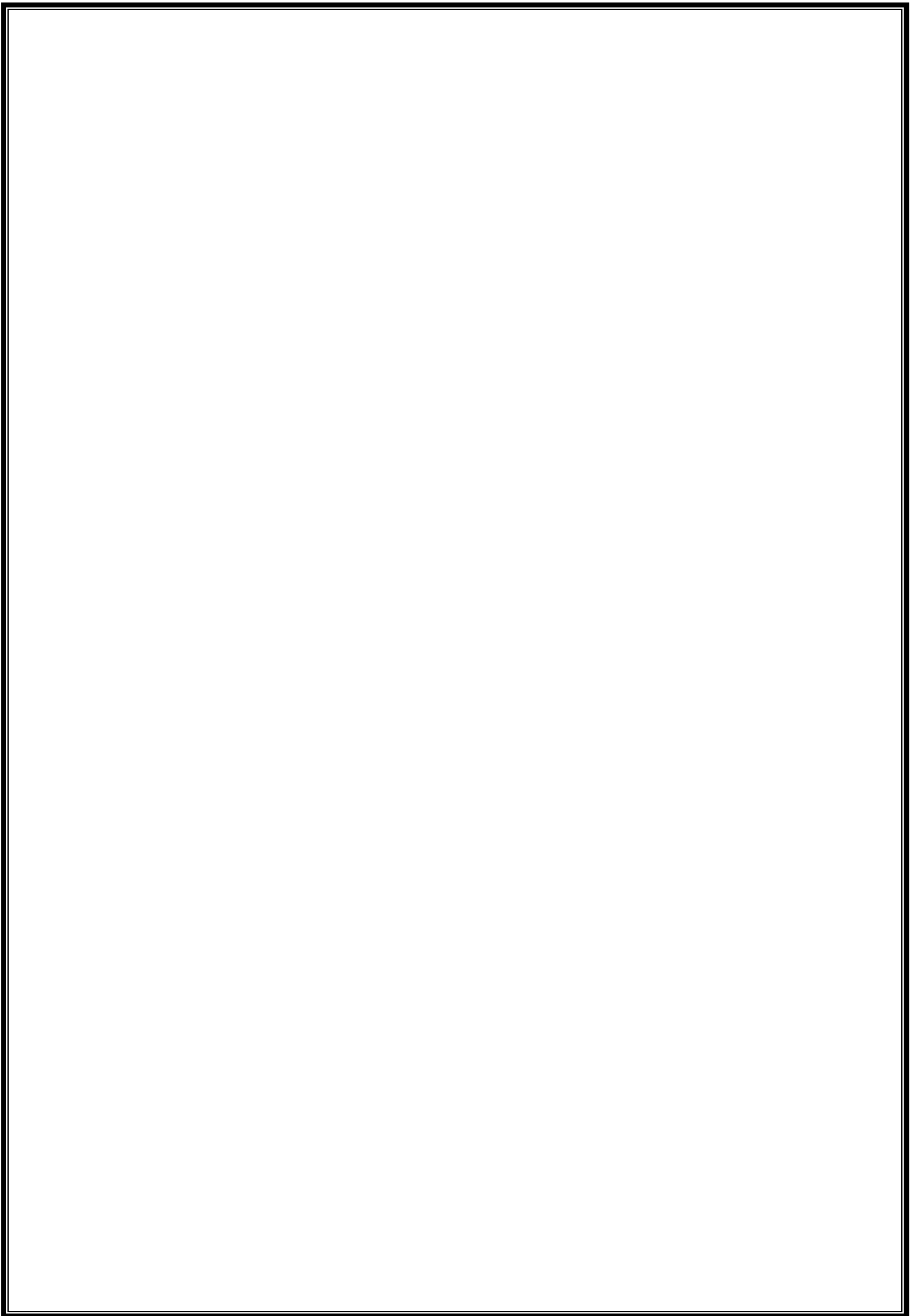


### 3. Line Chart:



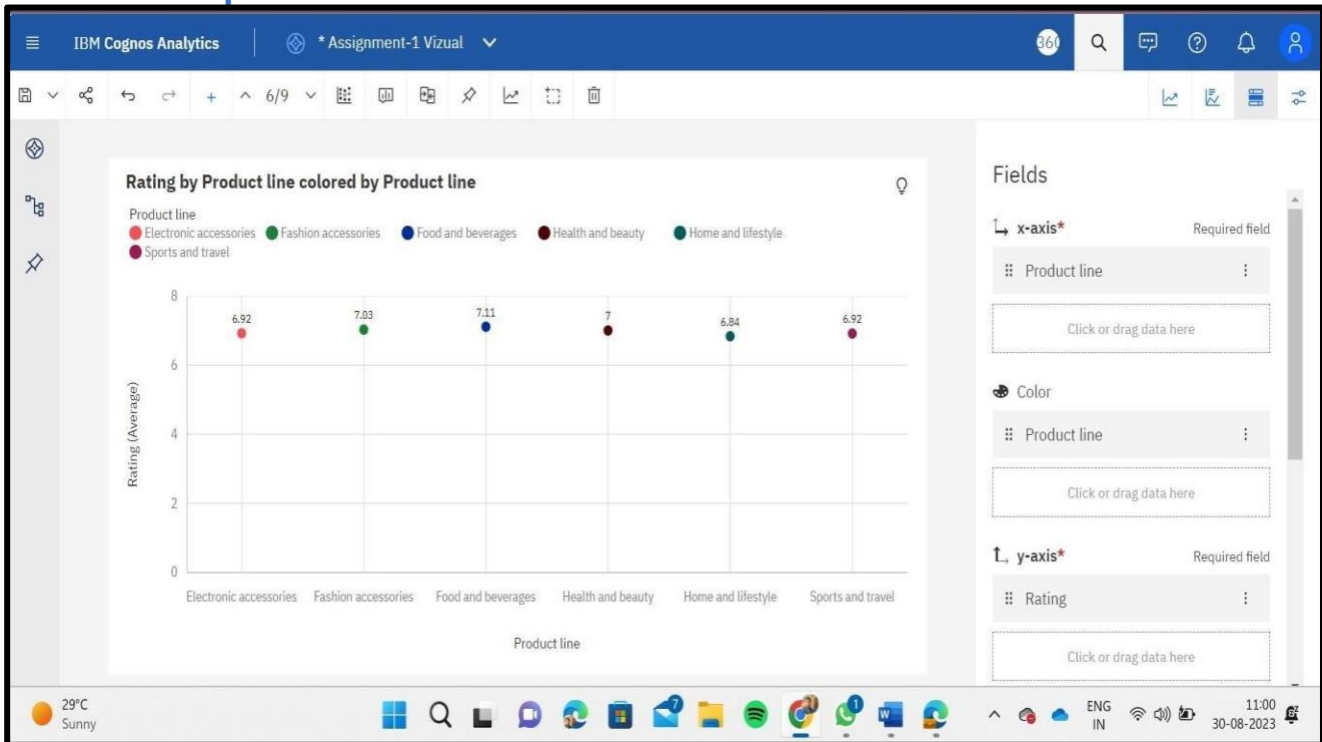
### 4. Scatter Plot :



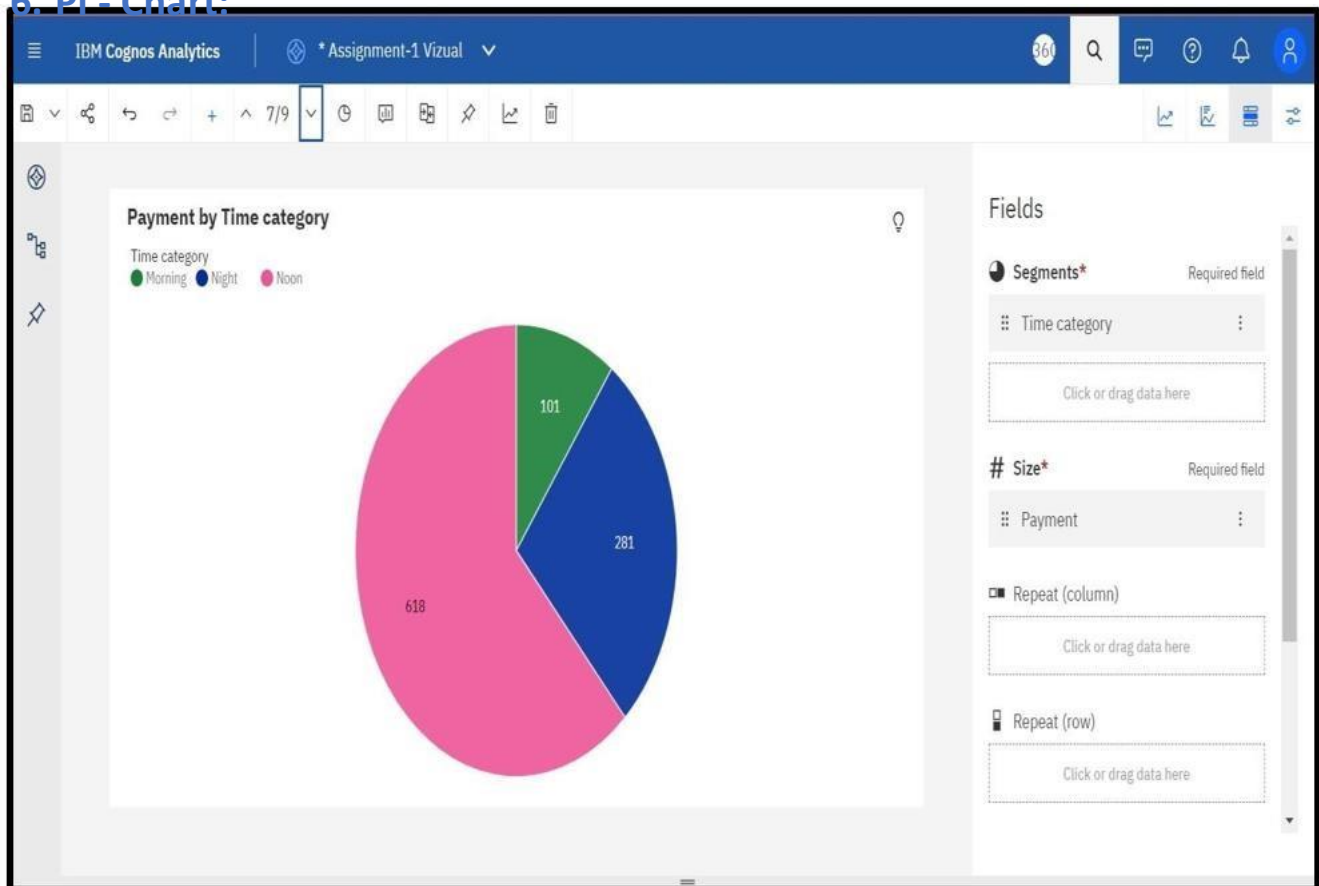




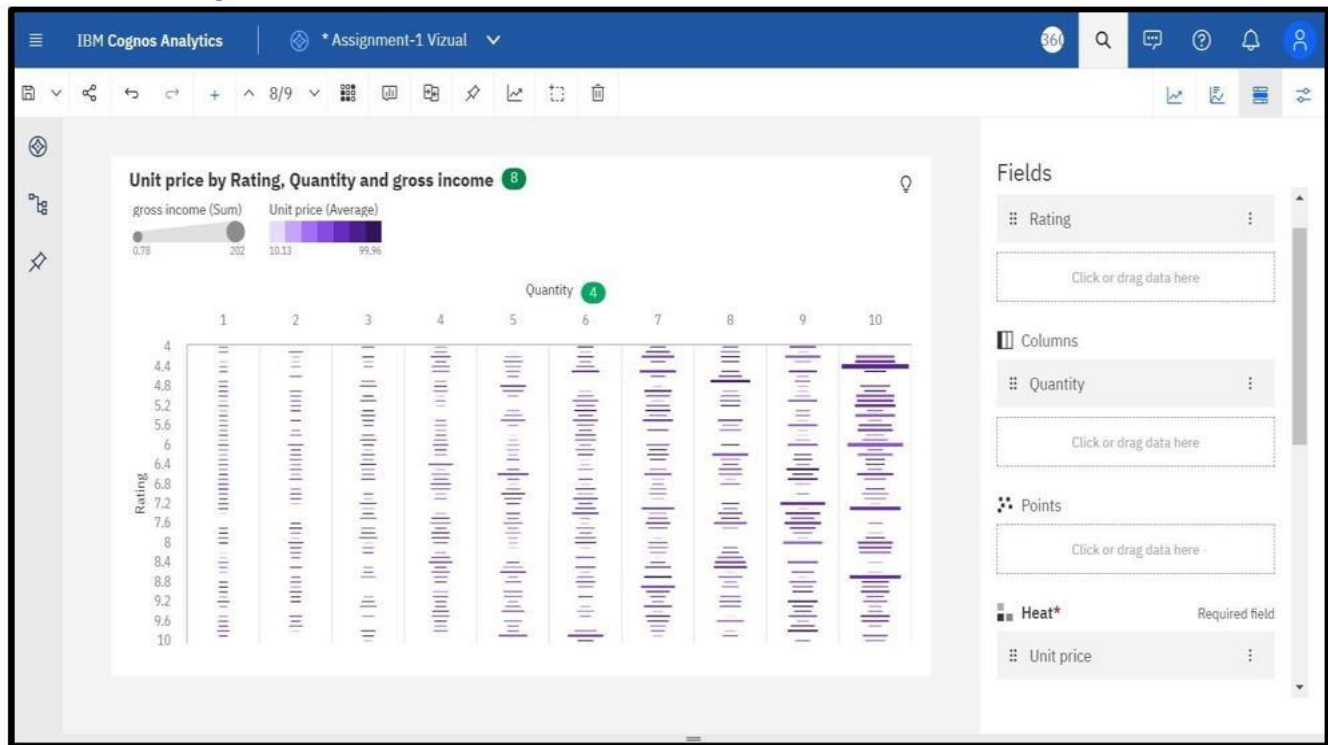
## 5. Point Graph:



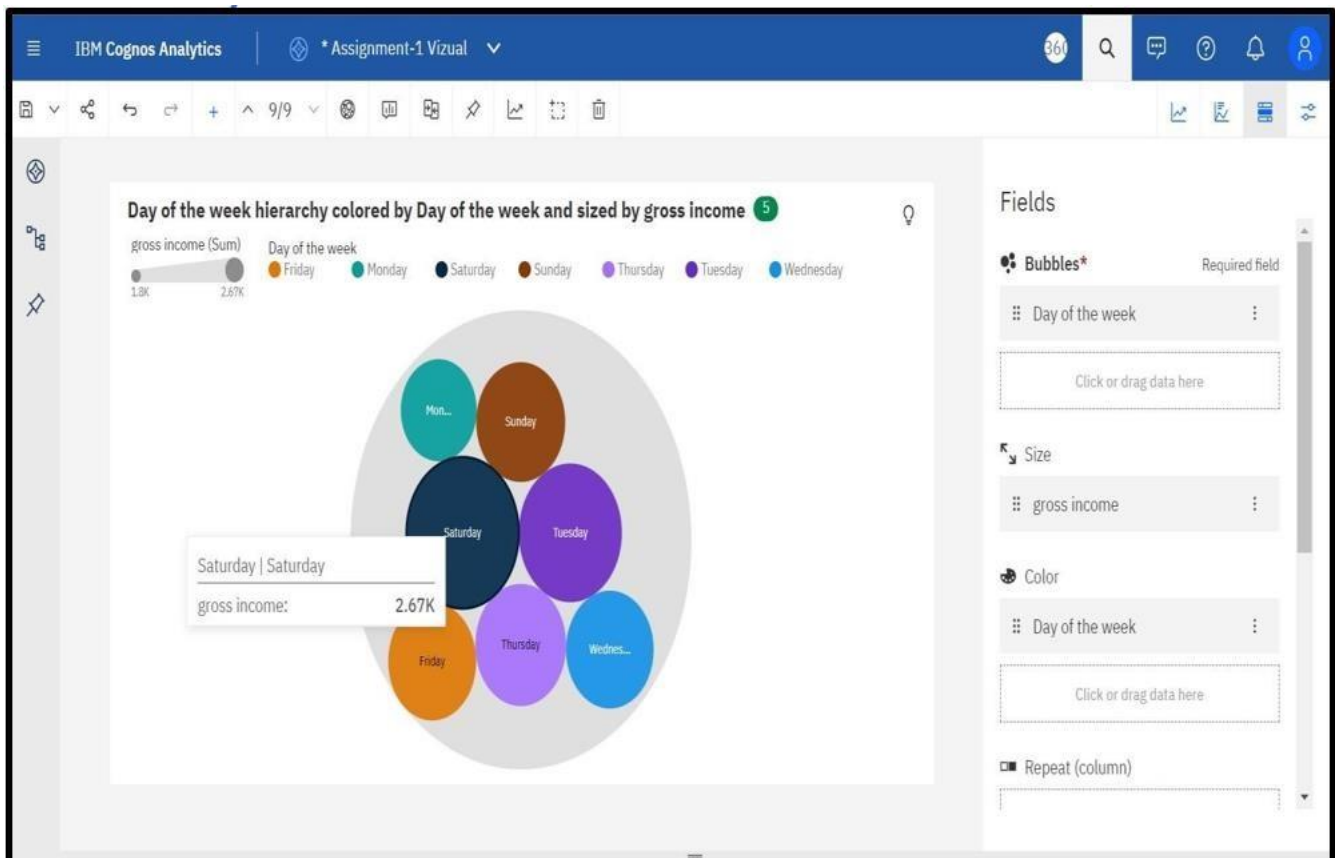
## 6. Pi - Chart:



## 7. Heat Map :



## 8. Hierarchy Bubble Chart:



## 9. Line Column Chat:

