

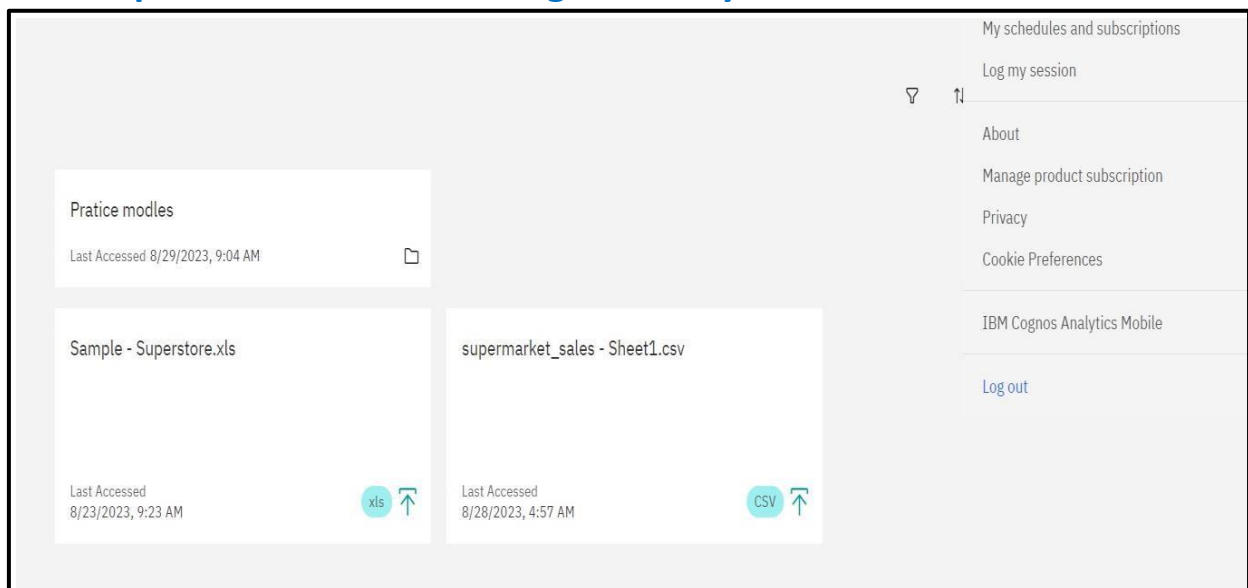
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IBM Cognos Analytics

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.

Data module

Search

- Assignment-1Mod
 - Navigation paths
 - supermark...heet1.csv
 - Time category
 - Row Id
 - Branch
 - City
 - Customer type
 - Gender
 - Product line
 - Unit price
 - Quantity
 - Tax 5%

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 beve

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

IBM Cognos Analytics | Assignment-1Mod

Search

- Q...
- T...
- T...l
- Time
- Year
- Month
- Day
- Day of the week
- Time
- Hour
- P...t
- g...
- R...

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' dialog in IBM Cognos Analytics. The 'Name' field is set to 'Time category'. The 'Expression' field contains the following SQL code:

```
6 // END
7
8 CASE
9   WHEN [supermarket_sales_Sheet1_csv.Hour_] >= '8' AND [supermarket_sales_Sheet1_csv.Hour_] <
10    '11' THEN 'Morning'
11   WHEN [supermarket_sales_Sheet1_csv.Hour_] >= '11' AND [supermarket_sales_Sheet1_csv.Hour_] <
12    '18' THEN 'Noon'
13   WHEN [supermarket_sales_Sheet1_csv.Hour_] >= '18' AND [supermarket_sales_Sheet1_csv.Hour_] <
14    '22' THEN 'Night'
15   ELSE NULL
16 END
```

The 'Components' pane on the left shows the 'supermarket_sales_Sheet1_csv' data source and its columns: 'Time category', 'Row Id', 'Branch', 'City', 'Customer type', 'Gender', 'Product line', 'Unit price', 'Quantity', and 'Tax 5%'. The 'Preview' section shows the following data:

Time category	Hour
Noon	13
Morning	10

3. Create A Data Module

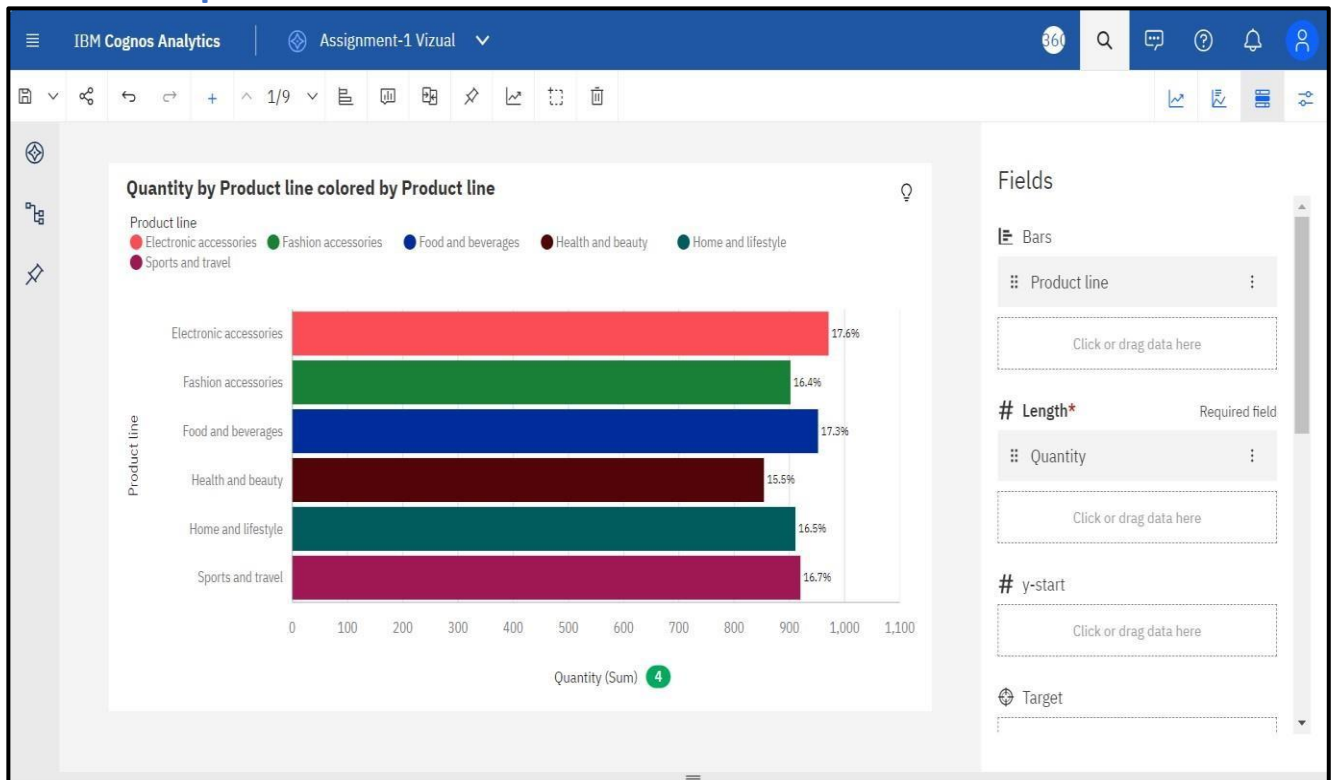
The screenshot shows the 'Save as' dialog in IBM Cognos Analytics. The 'Selected destination' is 'Pratice modles'. The 'My content' tab is selected, showing a list of content items:

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

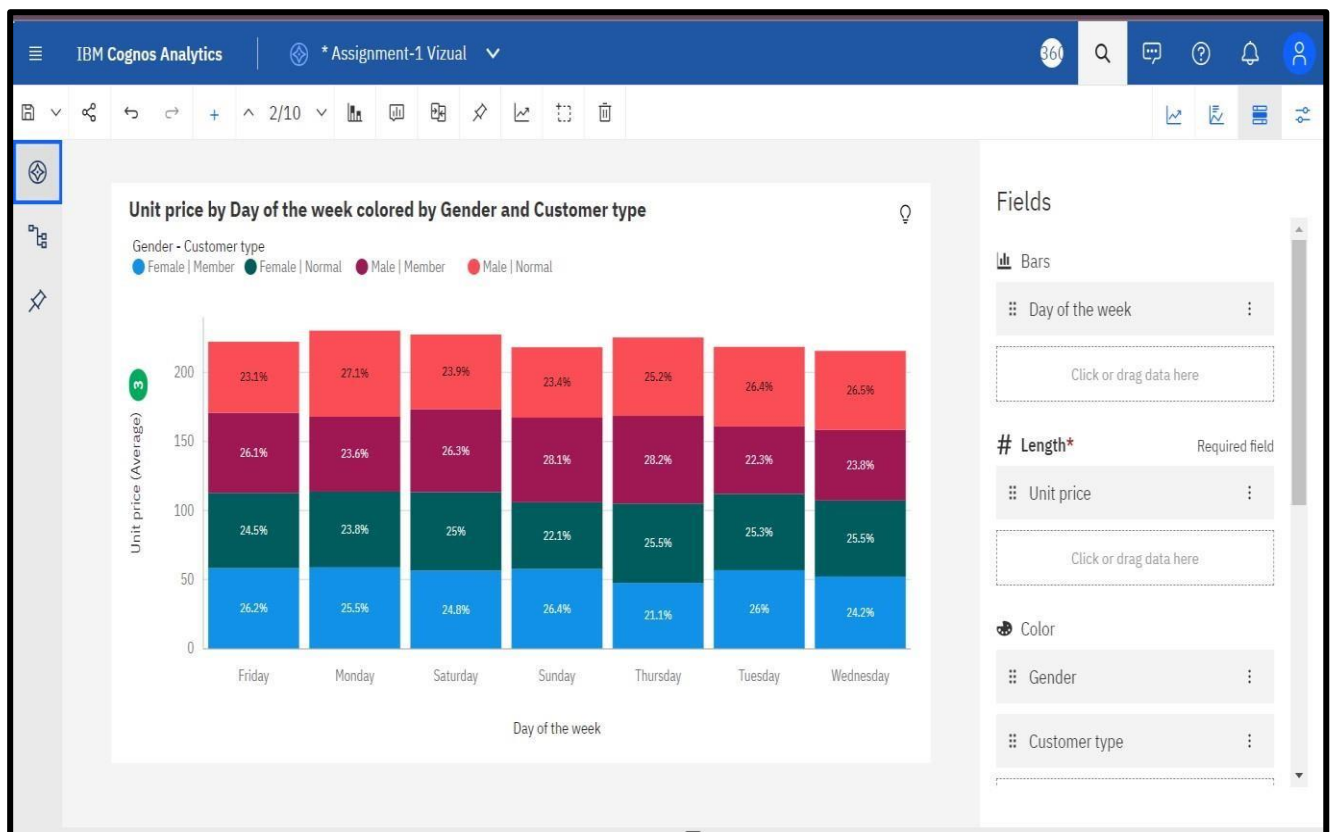
The 'Save' button is highlighted in blue. The background shows a preview of a data table with columns: 'Time category', 'Hour', 'Branch', 'City', 'Customer type', 'Gender', 'Product line', 'Unit price', 'Quantity', and 'Tax 5%'. The 'Gender' column is highlighted in the 'Properties' pane on the right.

4. Explore And Visualize The Dataset

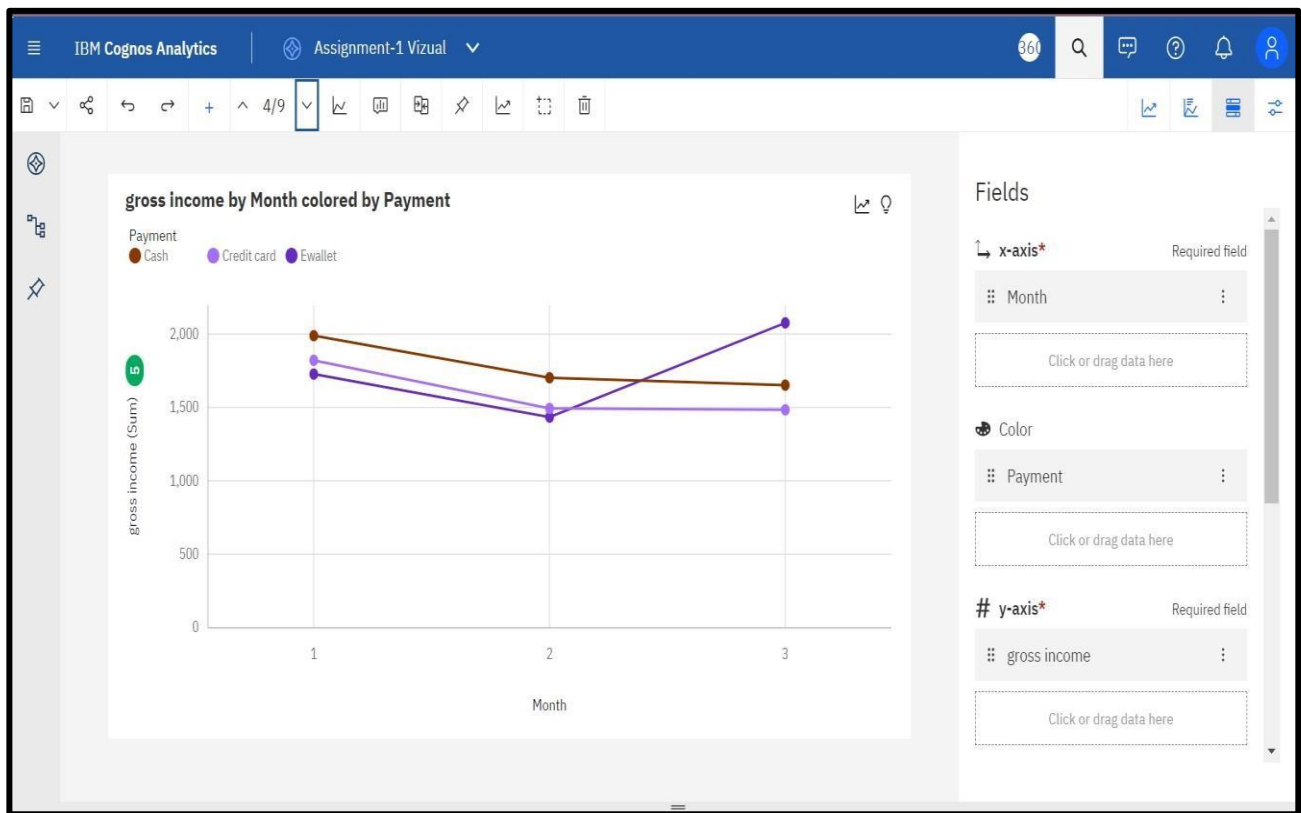
1. Bar Graph:



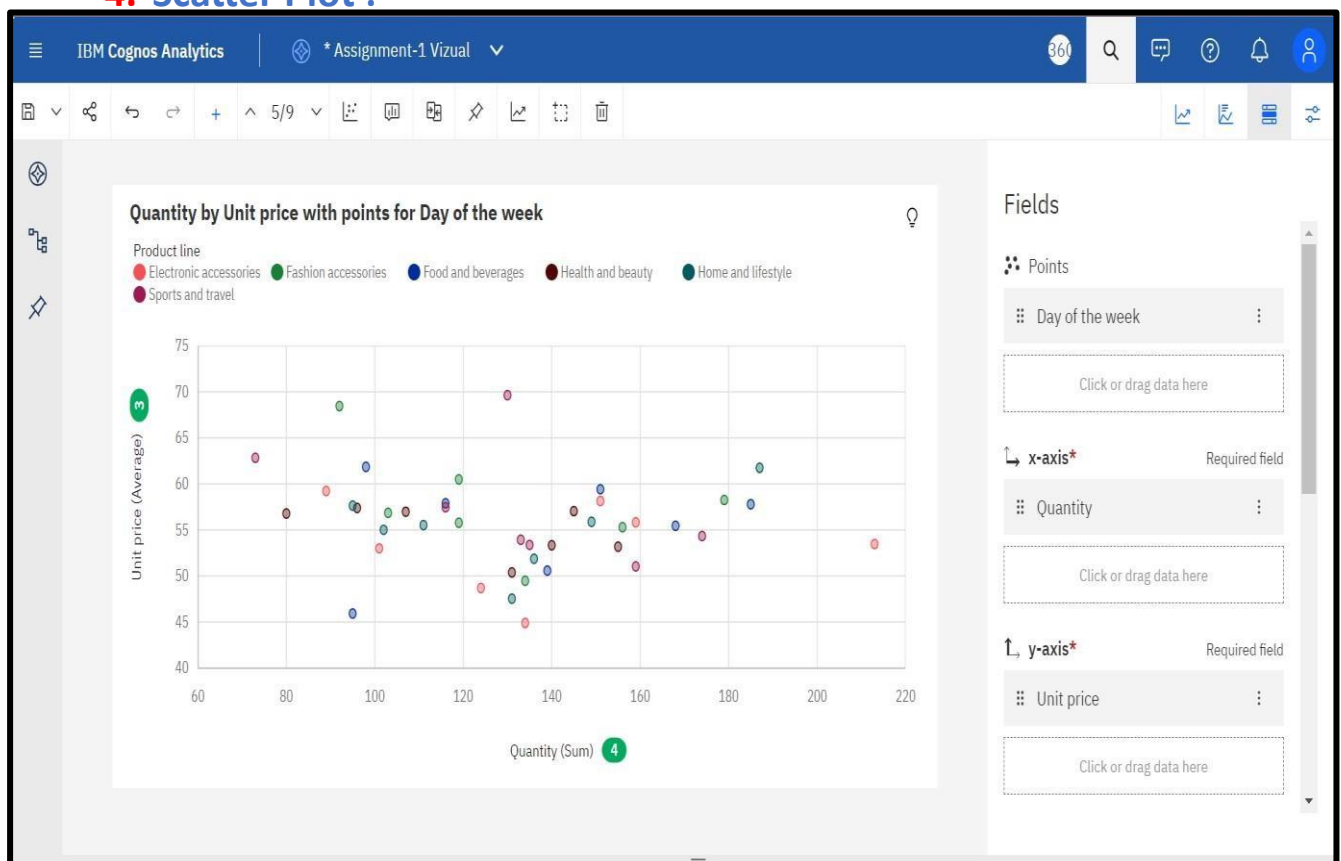
2. Stacked Column chart:



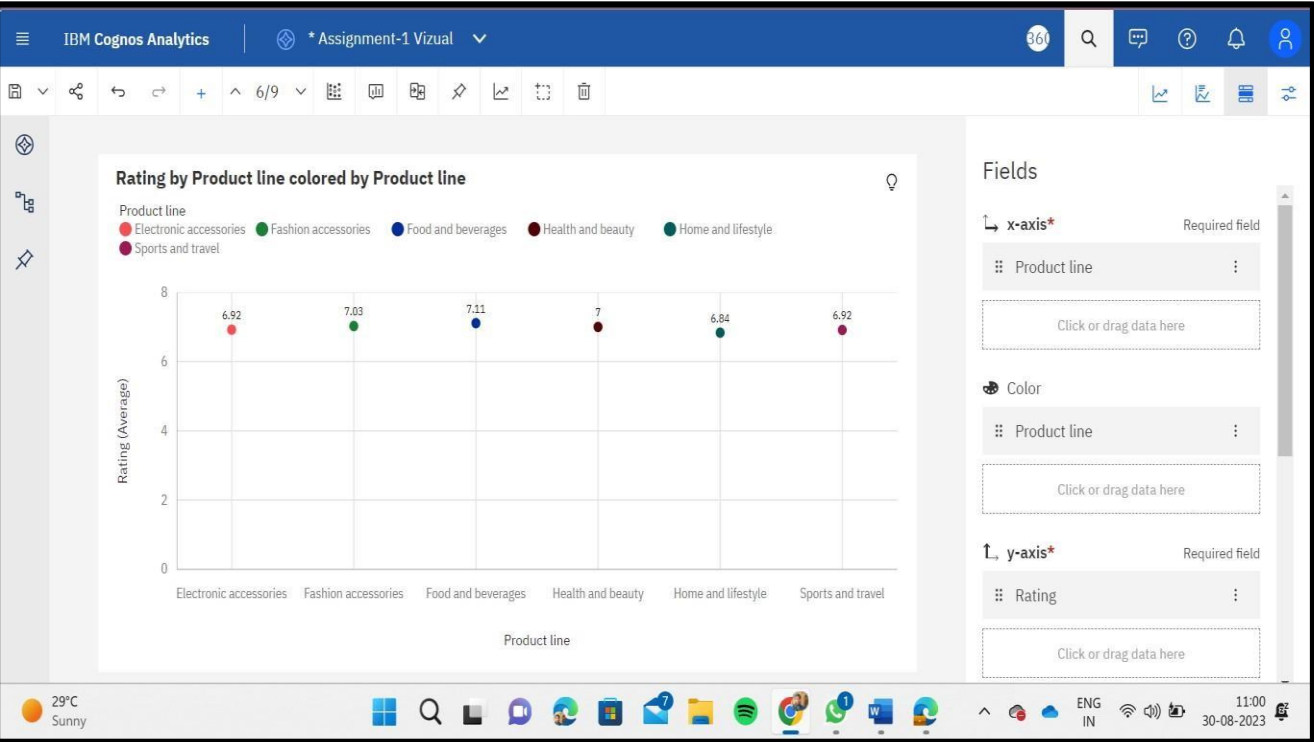
3. Line Chart:



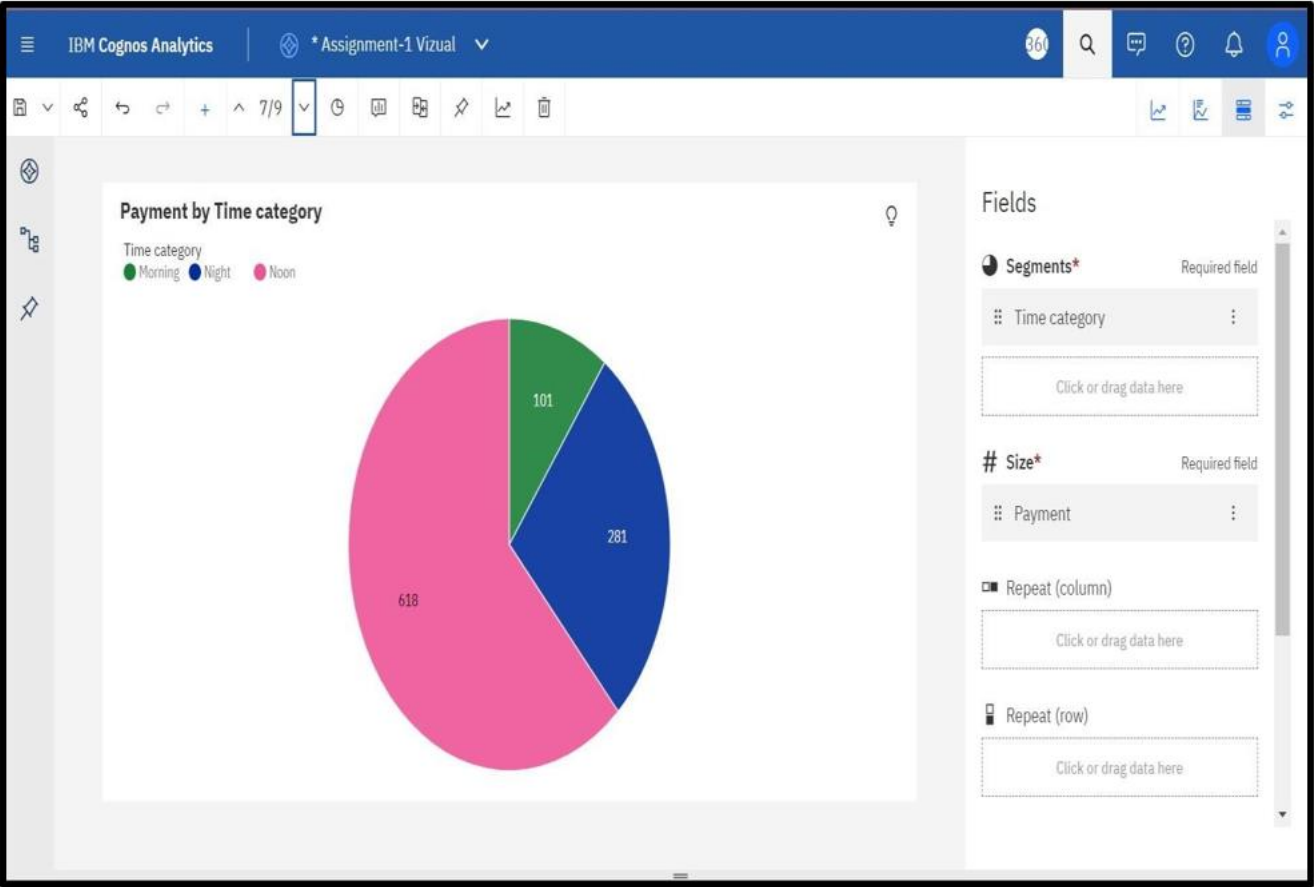
4. Scatter Plot :



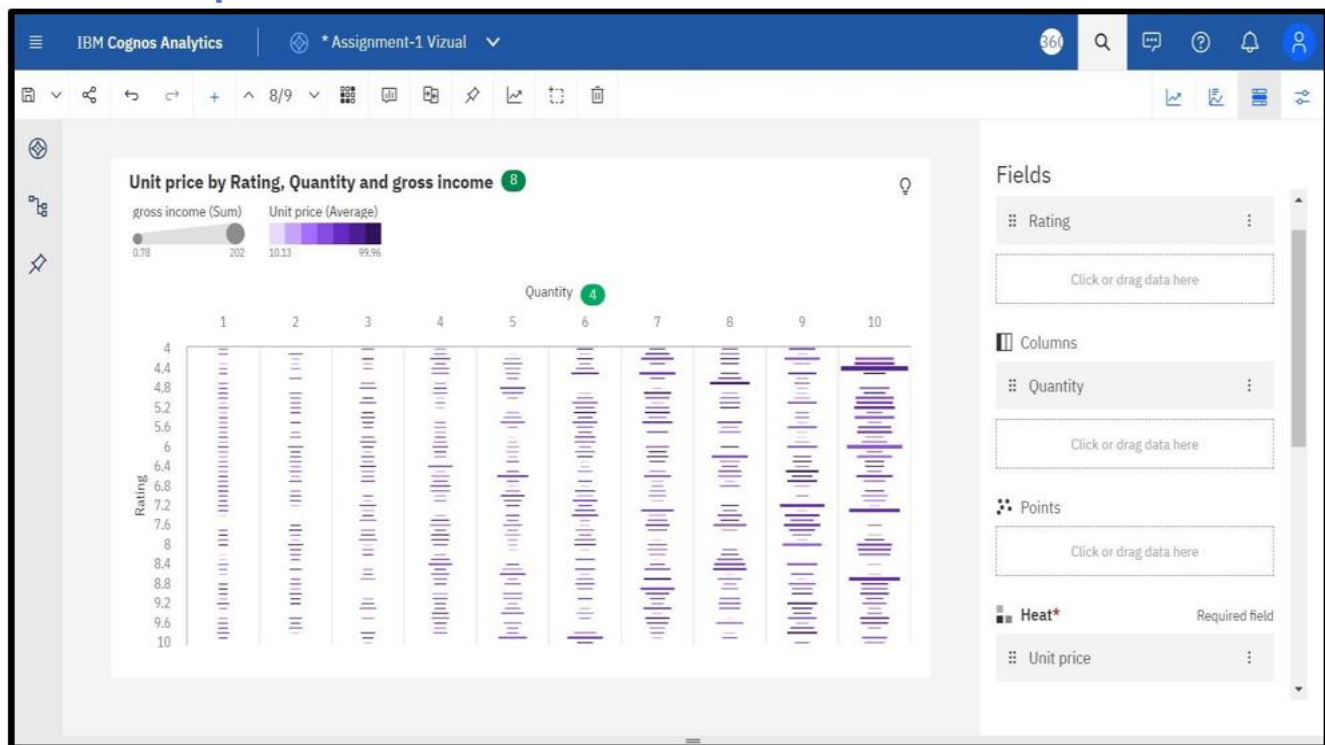
5. Point Graph:



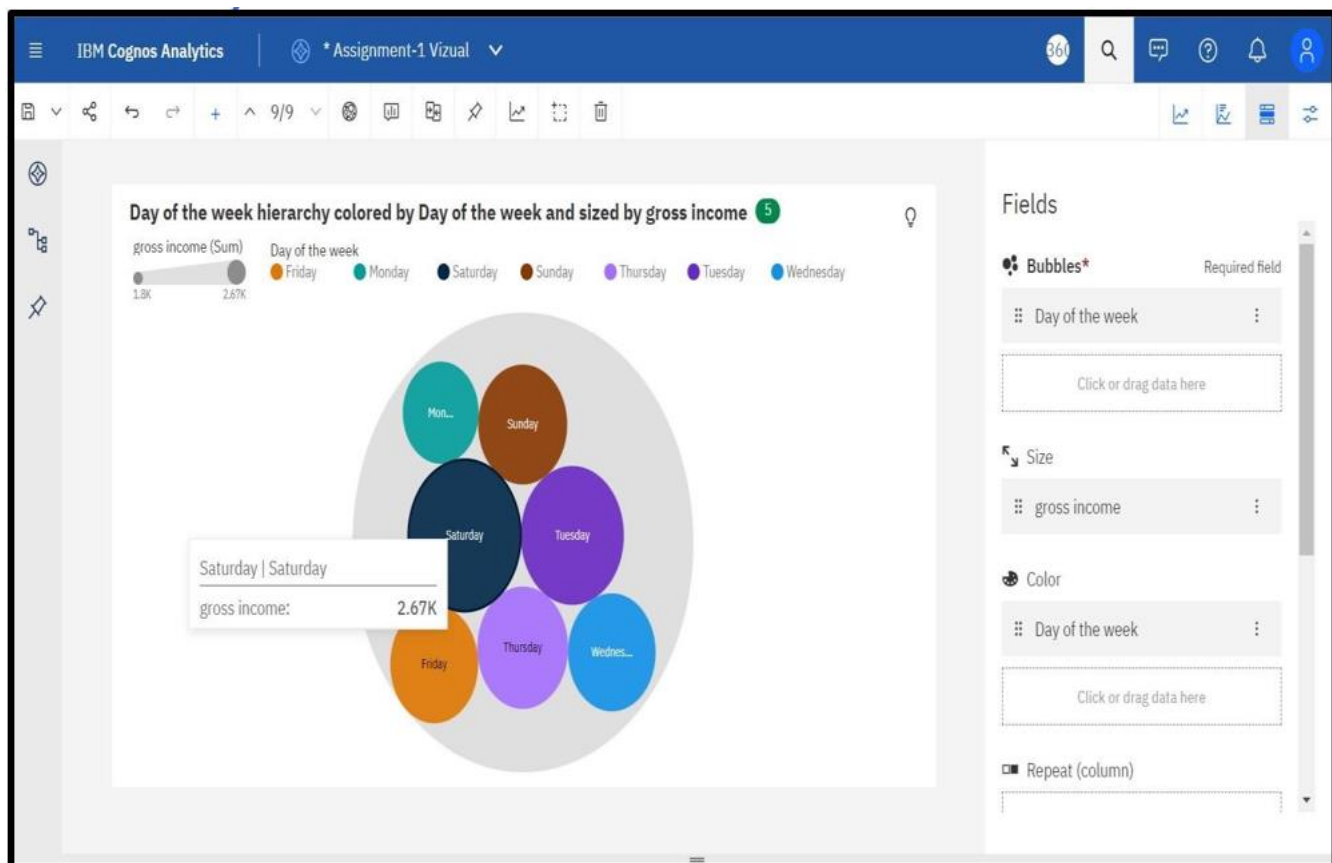
6. Pi - Chart:



7. Heat Map :



8. Hierarchy Bubble Chart:



9. Line Column Chart:

