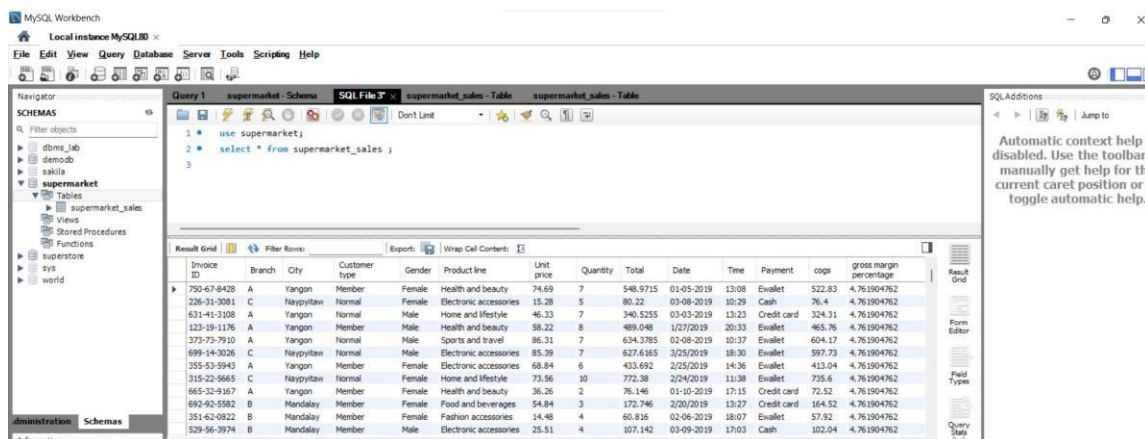


IBM COGNOS DATA ANALYTICS ASSIGNMENT-3

Name: Abhiram Vallamsetty
Reg no: 21BCB7005

➤ Uploading data into MySQL



➤ Data cleaning

1. Since columns Tax5% and gross income have the same values, we can remove any of the columns so column Tax5% is deleted

Before :

Customer type	Gender	Product line	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating
Member	Female	Health and beauty	74.69	7	26.1415	548.9715	1/5/2019	13:08	Ewallet	522.83	4.761904762	26.1415	9.1
Normal	Female	Electronic accessories	15.28	5	3.82	80.22	3/8/2019	10:29	Cash	76.4	4.761904762	3.82	9.6
Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	3/3/2019	13:23	Credit card	324.31	4.761904762	16.2155	7.4
Member	Male	Health and beauty	58.22	8	23.288	489.048	1/27/2019	20:33	Ewallet	465.76	4.761904762	23.288	8.4
Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	2/8/2019	10:37	Ewallet	604.17	4.761904762	30.2085	5.3
Normal	Male	Electronic accessories	85.39	7	29.8865	627.6165	3/25/2019	18:30	Ewallet	597.73	4.761904762	29.8865	4.1
Member	Female	Electronic accessories	68.84	6	20.652	433.692	2/25/2019	14:36	Ewallet	413.04	4.761904762	20.652	5.8
Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	2/24/2019	11:38	Ewallet	735.6	4.761904762	36.78	8
Member	Female	Health and beauty	36.26	2	3.626	76.146	1/10/2019	17:15	Credit card	72.52	4.761904762	3.626	7.2
Member	Female	Food and beverages	54.84	3	8.226	172.746	2/20/2019	13:27	Credit card	164.52	4.761904762	8.226	5.9
Member	Female	Fashion accessories	14.48	4	2.896	60.816	2/6/2019	18:07	Ewallet	57.92	4.761904762	2.896	4.5
Member	Male	Electronic accessories	25.51	4	5.102	107.142	3/9/2019	17:03	Cash	102.04	4.761904762	5.102	6.8

After:

```
3 alter table supermarket_sales drop column `Tax5%` ;
4 select * from supermarket_sales;
5
```

Customer type	Gender	Product line	Unit price	Quantity	Total	Date	Time	Payment	cogs	gross margin percentage	gross income	Rating
Member	Female	Health and beauty	74.69	7	548.9715	01-05-2019	13:08	Ewallet	522.83	4.761904762	26.1415	9.1
Normal	Female	Electronic accessories	15.28	5	80.22	03-08-2019	10:29	Cash	76.4	4.761904762	3.82	9.6
Normal	Male	Home and lifestyle	46.33	7	340.5255	03-03-2019	13:23	Credit card	324.31	4.761904762	16.2155	7.4
Member	Male	Health and beauty	58.22	8	489.048	1/27/2019	20:33	Ewallet	465.76	4.761904762	23.288	8.4
Normal	Male	Sports and travel	86.31	7	634.3785	02-08-2019	10:37	Ewallet	604.17	4.761904762	30.2085	5.3
Normal	Male	Electronic accessories	85.39	7	627.6165	3/25/2019	18:30	Ewallet	597.73	4.761904762	29.8865	4.1
Member	Female	Electronic accessories	68.84	6	433.692	2/25/2019	14:36	Ewallet	413.04	4.761904762	20.652	5.8
Normal	Female	Home and lifestyle	73.56	10	772.38	2/24/2019	11:38	Ewallet	735.6	4.761904762	36.78	8
Member	Female	Health and beauty	36.26	2	76.146	01-10-2019	17:15	Credit card	72.52	4.761904762	3.626	7.2
Member	Female	Food and beverages	54.84	3	172.746	2/20/2019	13:27	Credit card	164.52	4.761904762	8.226	5.9
Member	Female	Fashion accessories	14.48	4	60.816	02-06-2019	18:07	Ewallet	57.92	4.761904762	2.896	4.5
Member	Male	Electronic accessories	25.51	4	107.142	03-09-2019	17:03	Cash	102.04	4.761904762	5.102	6.8

2. Renamed column 'gross income' to 'revenue'

```

1 • use supermarket;
2 • select * from supermarket_sales ;
3 • alter table supermarket_sales drop column `Tax5%`;
4 • alter table `supermarket_sales`
5   change column `gross income` `Revenue` varchar(20) ;
6

```

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

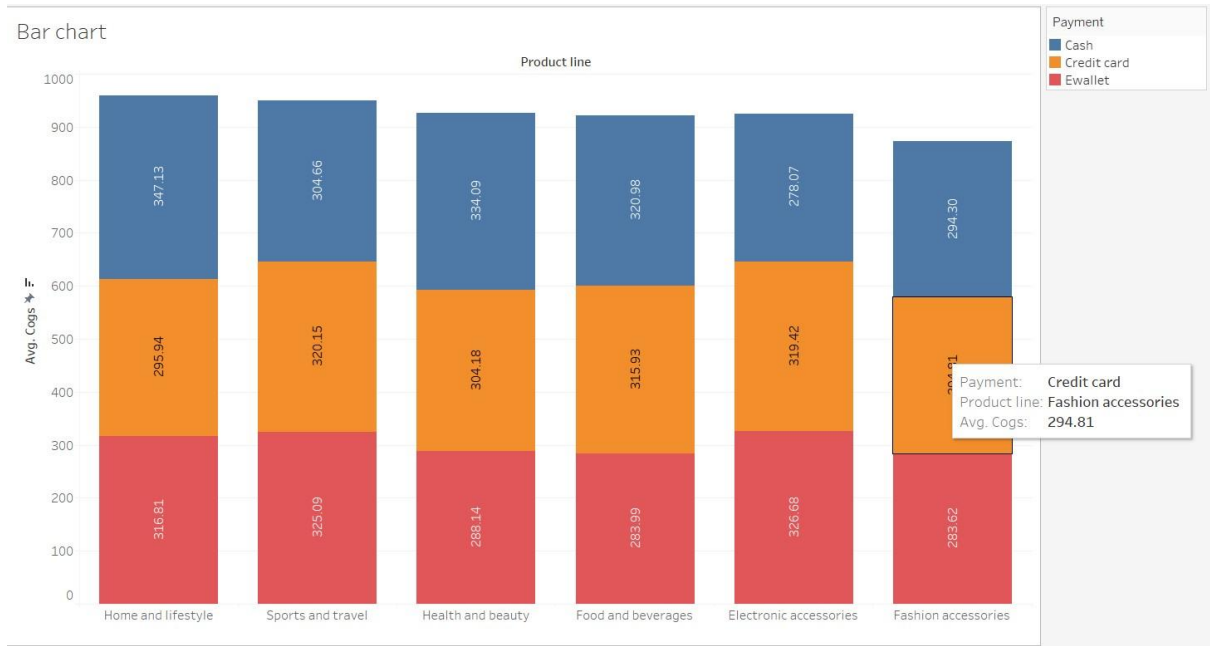
ity	Customer type	Gender	Product line	Unit price	Quantity	Total	Date	Time	Payment	cogs	gross margin percentage	Revenue	Rating
ington	Normal	Male	Food and beverages	54.67	3	172.2105	1/21/2019	18:00	Credit card	164.01	4.761904762	8.2005	8.6
andalay	Normal	Female	Home and lifestyle	40.3	2	84.63	03-11-2019	15:30	Ewallet	80.6	4.761904762	4.03	4.4
aypyitaw	Member	Male	Electronic accessories	86.04	5	451.71	2/25/2019	11:24	Ewallet	430.2	4.761904762	21.51	4.8
andalay	Normal	Male	Health and beauty	87.98	3	277.137	03-05-2019	10:40	Ewallet	263.94	4.761904762	13.197	5.1
andalay	Normal	Male	Home and lifestyle	33.2	2	69.72	3/15/2019	12:20	Credit card	66.4	4.761904762	3.32	4.4
ington	Normal	Male	Electronic accessories	34.56	5	181.44	2/17/2019	11:15	Ewallet	172.8	4.761904762	8.64	9.9
ington	Member	Male	Sports and travel	88.63	3	279.1845	03-02-2019	17:36	Ewallet	265.89	4.761904762	13.2945	6
ington	Member	Female	Home and lifestyle	52.59	8	441.756	3/22/2019	19:20	Credit card	420.72	4.761904762	21.036	8.5
andalay	Normal	Male	Fashion accessories	33.52	1	35.196	02-08-2019	15:31	Cash	33.52	4.761904762	1.676	6.7
ington	Normal	Female	Fashion accessories	87.67	2	184.107	03-10-2019	12:17	Credit card	175.34	4.761904762	8.767	7.7
andalay	Normal	Female	Food and beverages	88.36	5	463.89	1/25/2019	19:48	Cash	441.8	4.761904762	22.09	9.6
ington	Normal	Male	Health and beauty	24.89	9	235.2105	3/15/2019	15:36	Cash	224.01	4.761904762	11.2005	7.4

➤ Integration of MySQL with Tableau

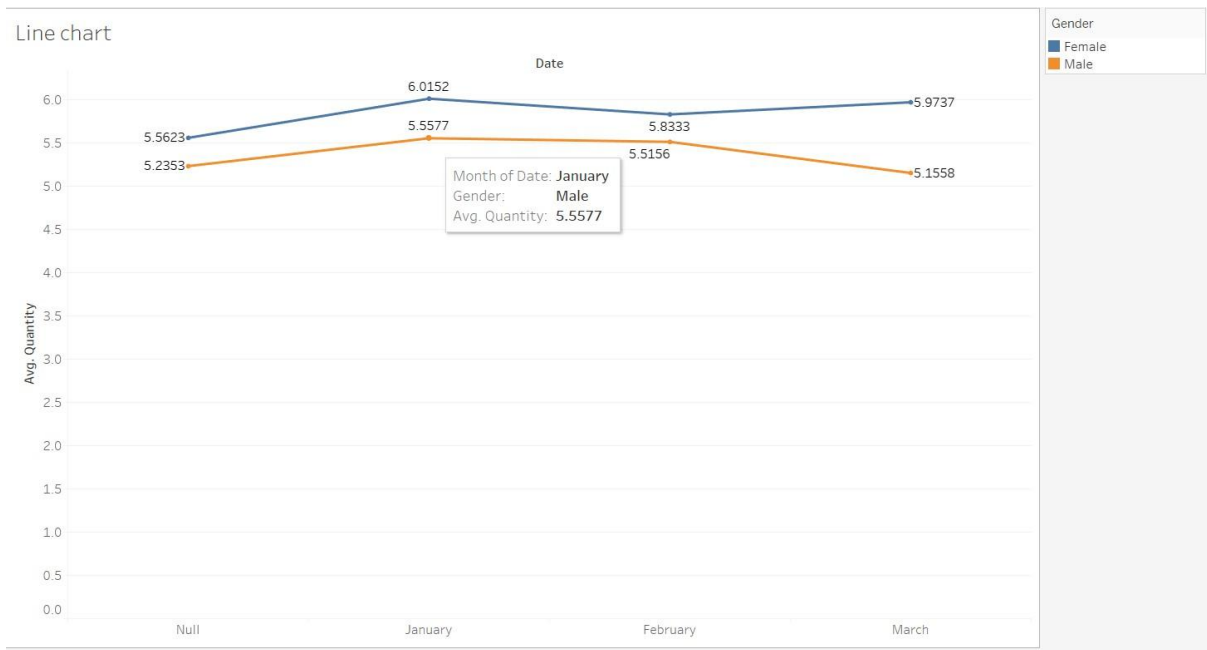
The screenshot displays the Tableau Desktop environment. On the left, the 'Connections' pane shows a local host connection to a 'supermarket' database. The 'Table' pane lists the 'supermarket_sales' table. The main workspace shows the 'Data Source' view for 'supermarket_sales', indicating 16 fields and 1000 rows. Below this, a preview of the table data is shown, including columns like Invoice ID, Branch, City, Customer type, Gender, Product line, and Unit price. The bottom pane shows the 'Columns' and 'Rows' shelves, which are currently empty, and a 'Marks' card set to 'Automatic'. The main visualization area is blank, with a message 'Need more data? Drag tables here to relate them. Learn more.'

➤ **Visualizations of the dataset**

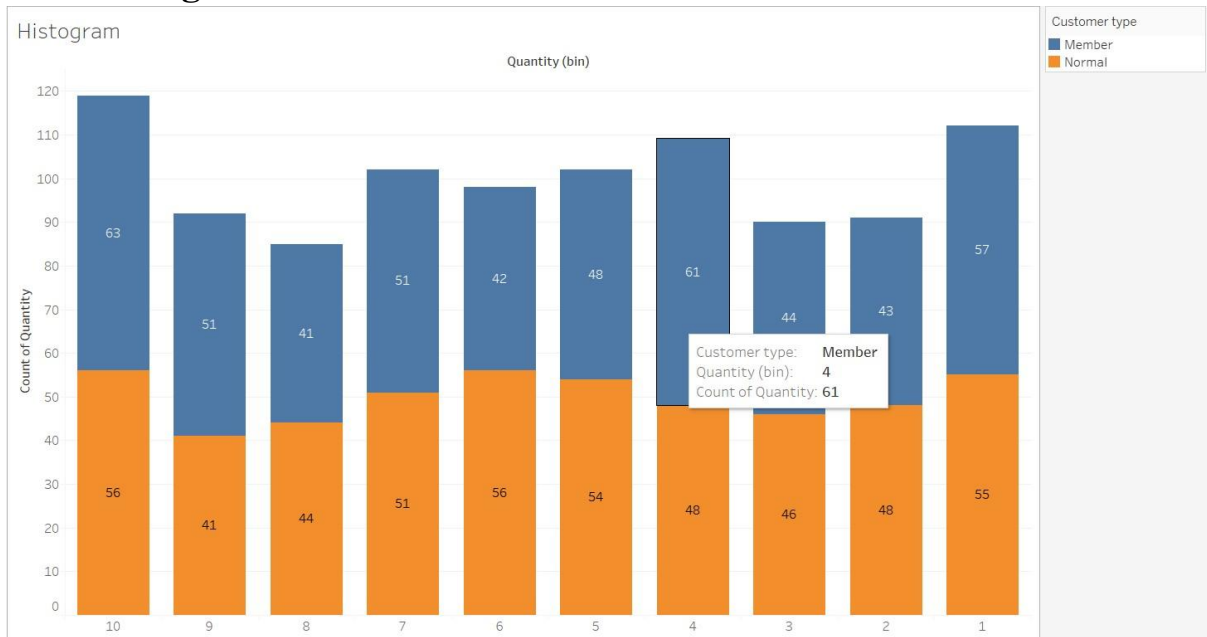
1. Bar chart



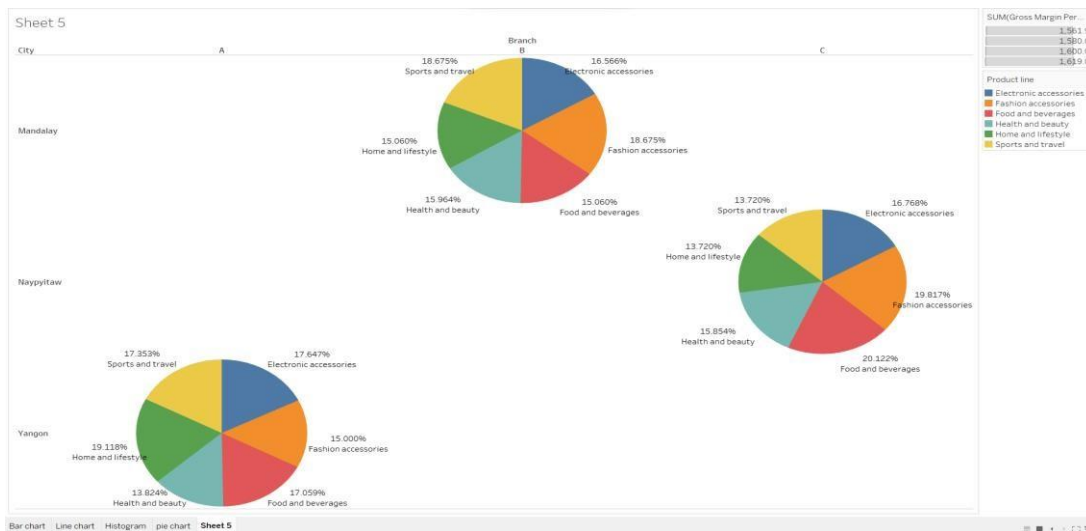
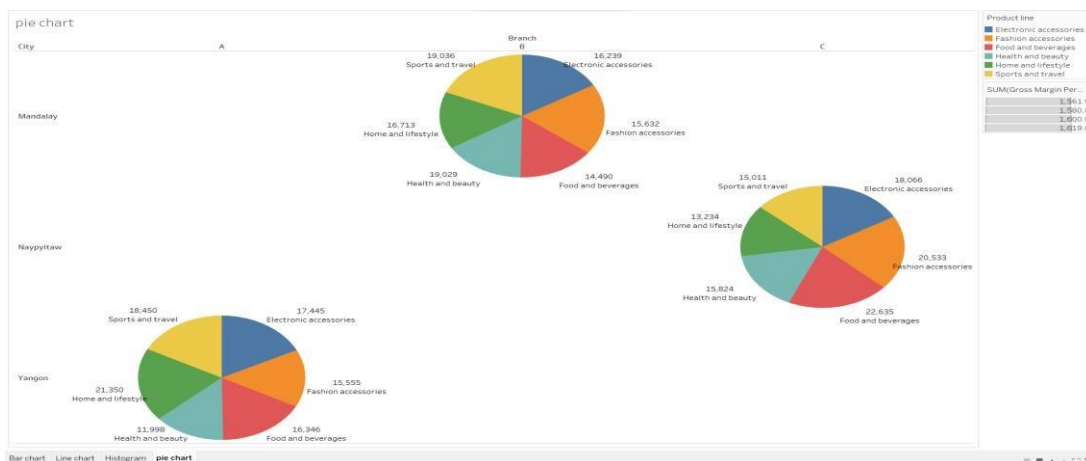
2. Line chart



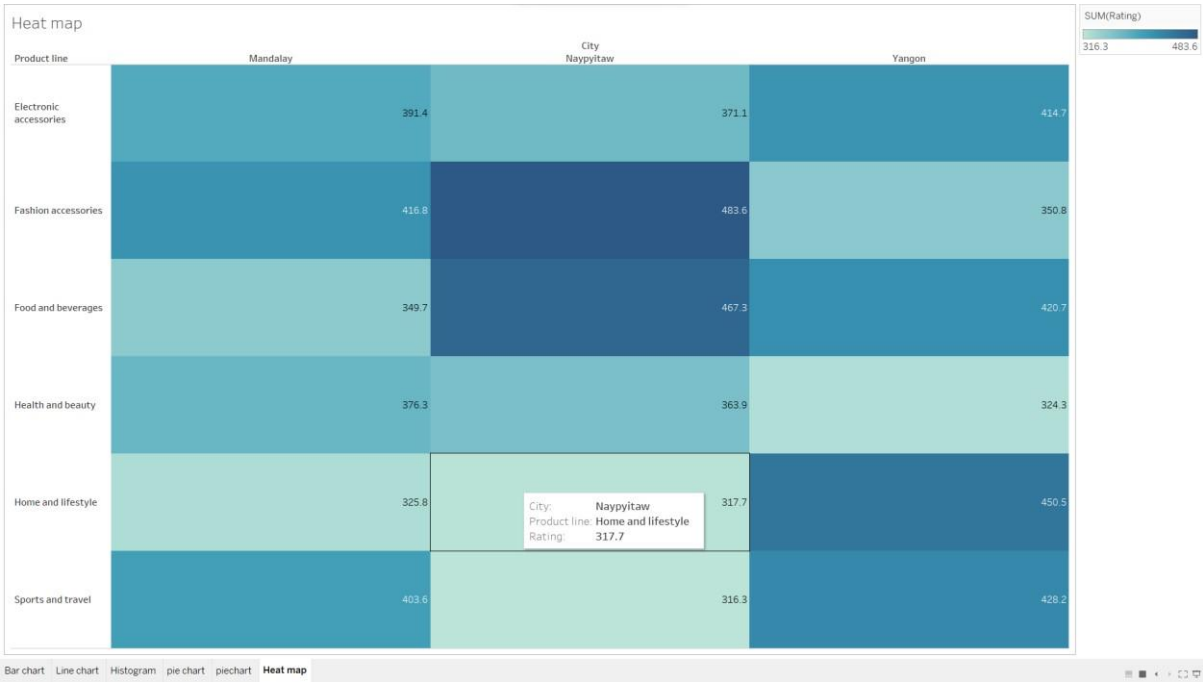
3. Histogram



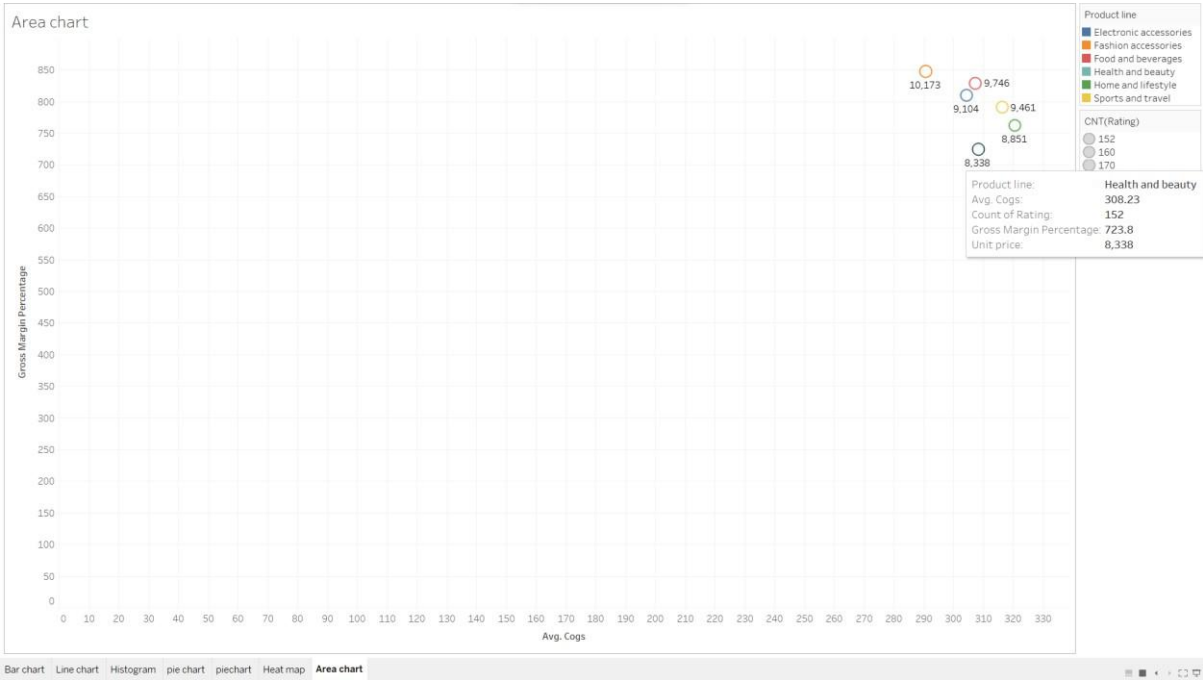
4. Pie chart



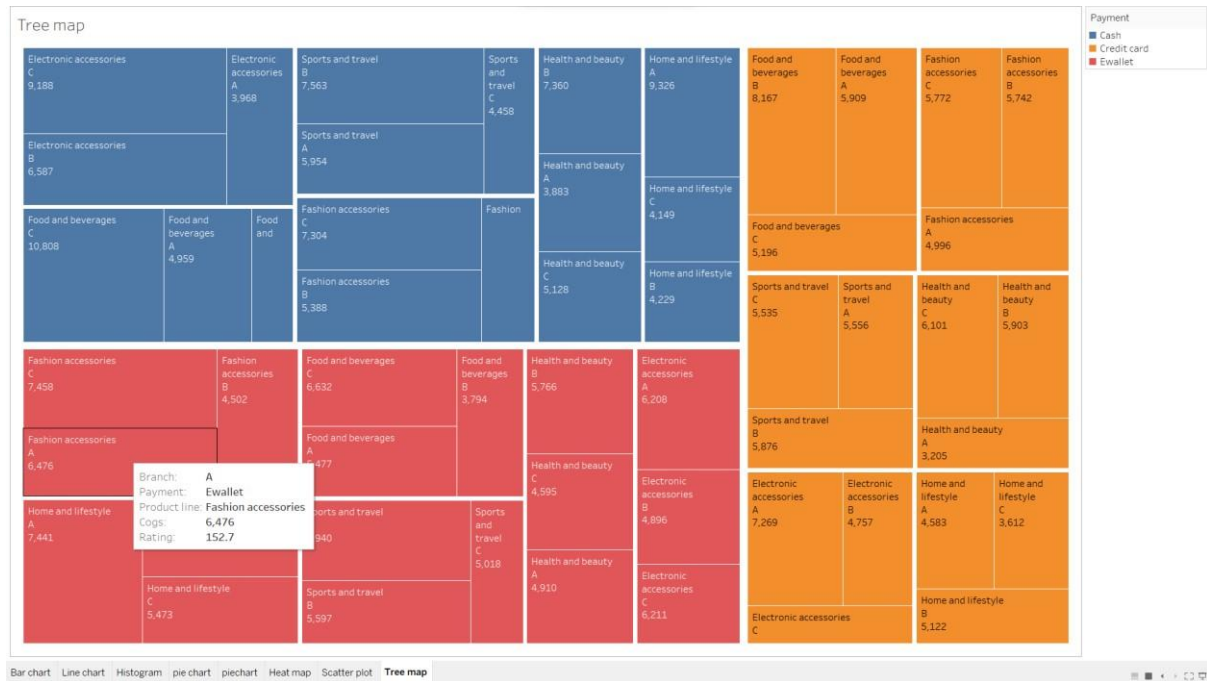
5. Heat map



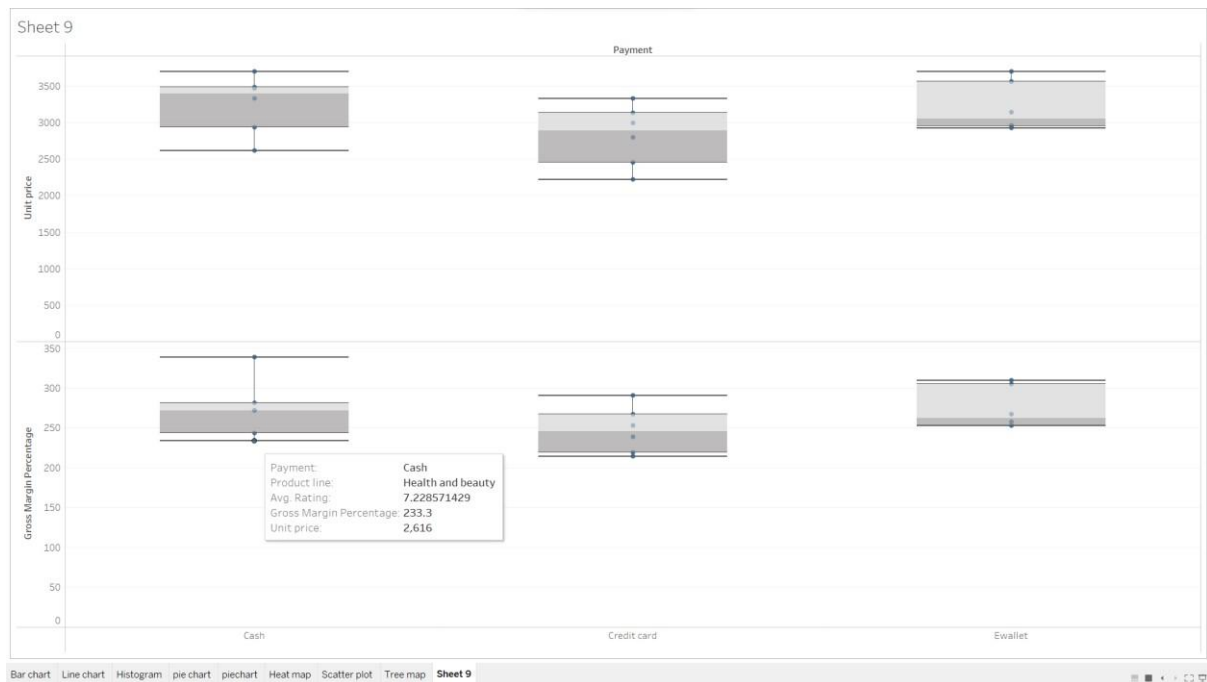
6. Scatter plot



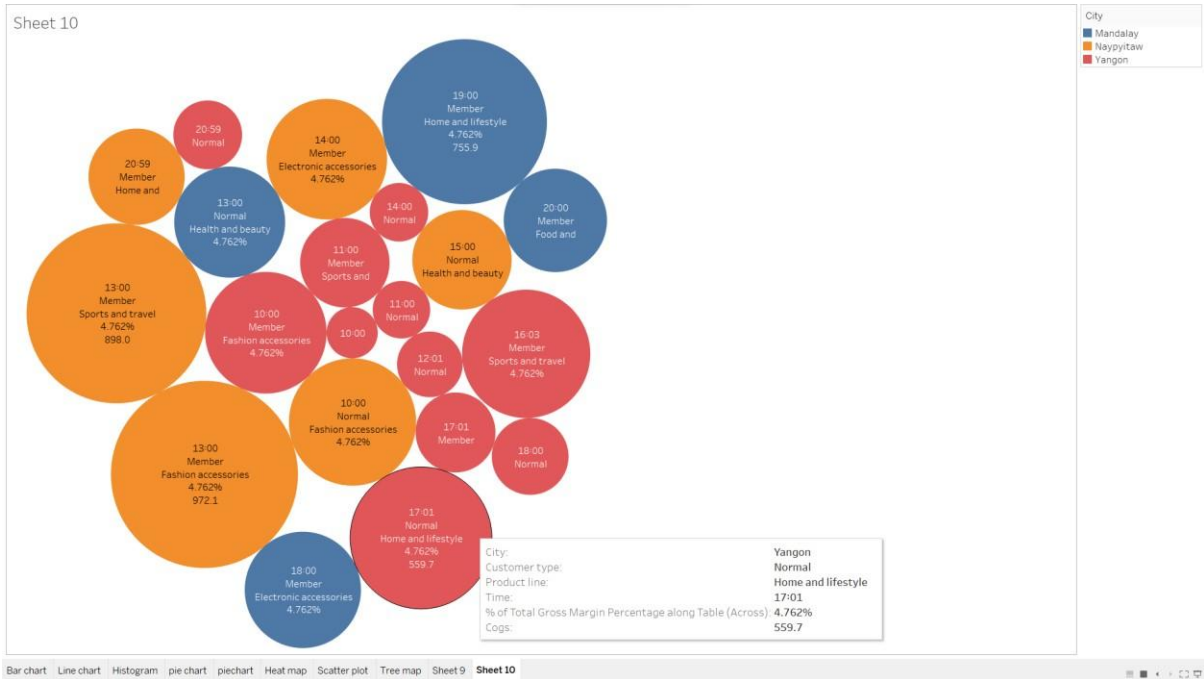
7. Tree map



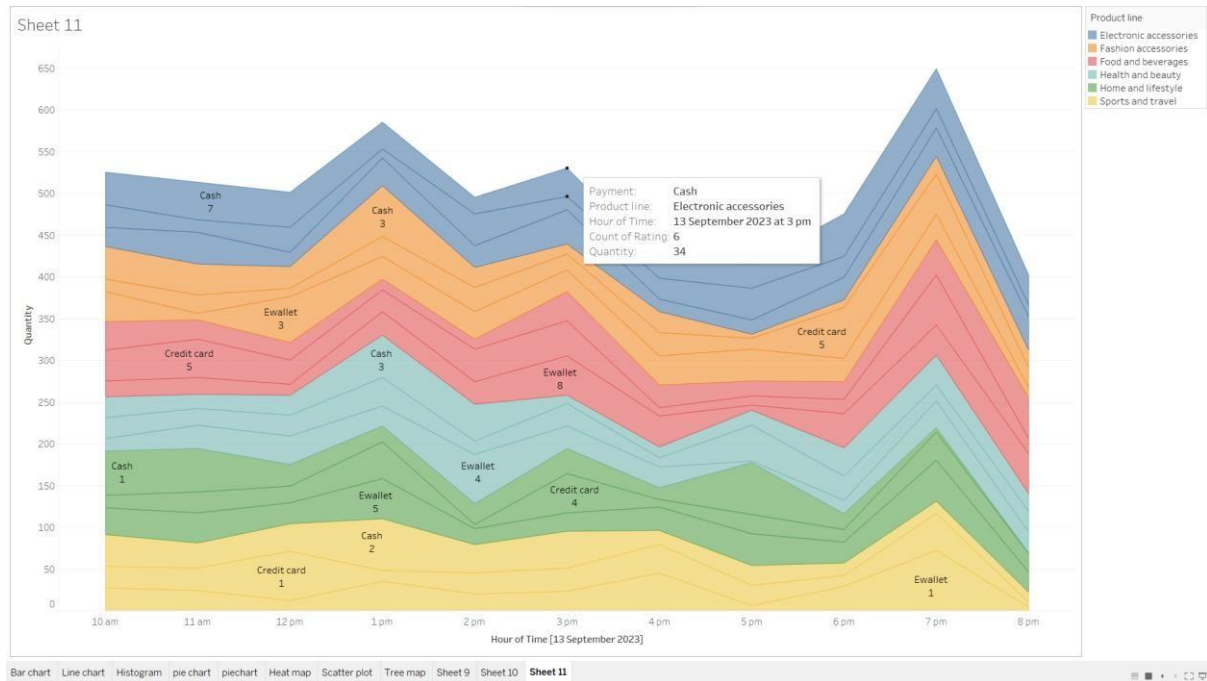
8. Box and whisker plots



9. Bubble chart



10. Area chart



11. Stacked Bar chart

