<div align="right">

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<div align="center">

Experiment No : 7

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AIM: To perform BI using Tableau
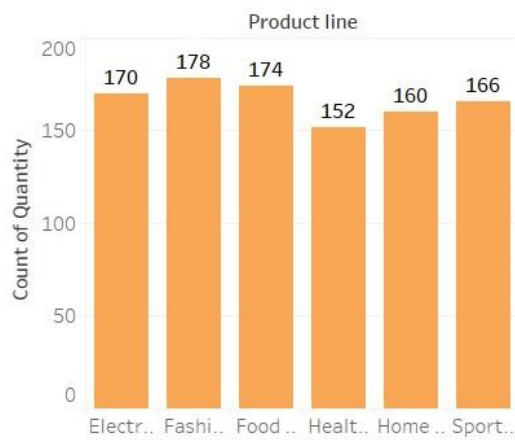
Theory: Data set for Supermarket Sales

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
1	Invoice ID	Branch	City	Customer	Gender	Product lin	Unit price	Quantity	Tax 5%	Total	Date	Time	Payment	cogs	gross marg	gross inco	Rating
2	750-67-84	A	Yangon	Member	Female	Health and	74.69	7	26.1415	548.9715	01-05-19	13:08	Ewallet	522.83	4.761905	26.1415	9.1
3	226-31-30	C	Naypyitaw	Normal	Female	Electronic	15.28	5	3.82	80.22	03-08-19	10:29	Cash	76.4	4.761905	3.82	9.6
4	631-41-31	A	Yangon	Normal	Male	Home and	46.33	7	16.2155	340.5255	03-03-19	13:23	Credit card	324.31	4.761905	16.2155	7.4
5	123-19-11	A	Yangon	Member	Male	Health and	58.22	8	23.288	489.048	1/27/2019	20:33	Ewallet	465.76	4.761905	23.288	8.4
6	373-73-79	A	Yangon	Normal	Male	Sports and	86.31	7	30.2085	634.3785	02-08-19	10:37	Ewallet	604.17	4.761905	30.2085	5.3
7	699-14-30	C	Naypyitaw	Normal	Male	Electronic	85.39	7	29.8865	627.6165	3/25/2019	18:30	Ewallet	597.73	4.761905	29.8865	4.1
8	355-53-59	A	Yangon	Member	Female	Electronic	68.84	6	20.652	433.692	2/25/2019	14:36	Ewallet	413.04	4.761905	20.652	5.8
9	315-22-56	C	Naypyitaw	Normal	Female	Home and	73.56	10	36.78	772.38	2/24/2019	11:38	Ewallet	735.6	4.761905	36.78	8
10	665-32-91	A	Yangon	Member	Female	Health and	36.26	2	3.626	76.146	01-10-19	17:15	Credit card	72.52	4.761905	3.626	7.2
11	692-92-55	B	Mandalay	Member	Female	Food and	54.84	3	8.226	172.746	2/20/2019	13:27	Credit card	164.52	4.761905	8.226	5.9
12	351-62-08	B	Mandalay	Member	Female	Fashion ac	14.48	4	2.896	60.816	02-06-19	18:07	Ewallet	57.92	4.761905	2.896	4.5
13	529-56-39	B	Mandalay	Member	Male	Electronic	25.51	4	5.102	107.142	03-09-19	17:03	Cash	102.04	4.761905	5.102	6.8
14	365-64-05	A	Yangon	Normal	Female	Electronic	46.95	5	11.7375	246.4875	02-12-19	10:25	Ewallet	234.75	4.761905	11.7375	7.1
15	252-56-26	A	Yangon	Normal	Male	Food and	43.19	10	21.595	453.495	02-07-19	16:48	Ewallet	431.9	4.761905	21.595	8.2
16	829-34-39	A	Yangon	Normal	Female	Health and	71.38	10	35.69	749.49	3/29/2019	19:21	Cash	713.8	4.761905	35.69	5.7
17	299-46-18	B	Mandalay	Member	Female	Sports and	93.72	6	28.116	590.436	1/15/2019	16:19	Cash	562.32	4.761905	28.116	4.5
18	656-95-93	A	Yangon	Member	Female	Health and	68.93	7	24.1255	506.6355	03-11-19	11:03	Credit card	482.51	4.761905	24.1255	4.6
19	765-26-69	A	Yangon	Normal	Male	Sports and	72.61	6	21.783	457.443	01-01-19	10:39	Credit card	435.66	4.761905	21.783	6.9
20	329-62-15	A	Yangon	Normal	Male	Food and	54.67	3	8.2005	172.2105	1/21/2019	18:00	Credit card	164.01	4.761905	8.2005	8.6

Tableau is data visualization and data analytics tool that aims to help people see and understand data. In other words, it simply converts raw data into a very easily understandable format. Data analysis is great, as it is a powerful visualization tool in the business intelligence industry
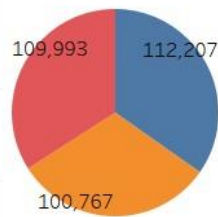
Tableau is a visual analytics engine that makes it easier to create interactive visual analytics in the form of dashboards. These dashboards make it easier for non-technical analysts and end users to convert data into understandable, interactive graphics.
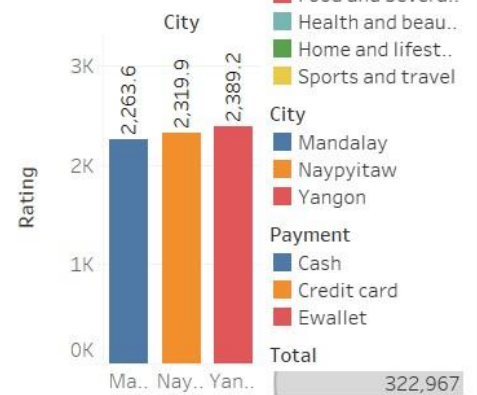
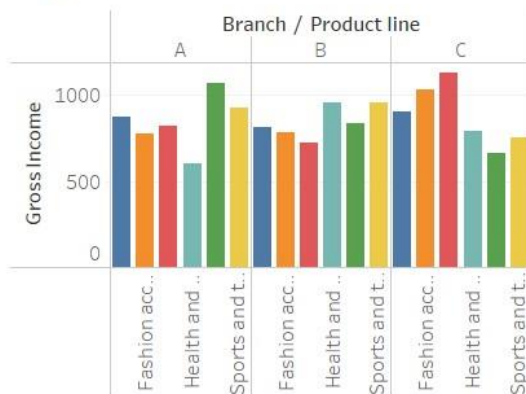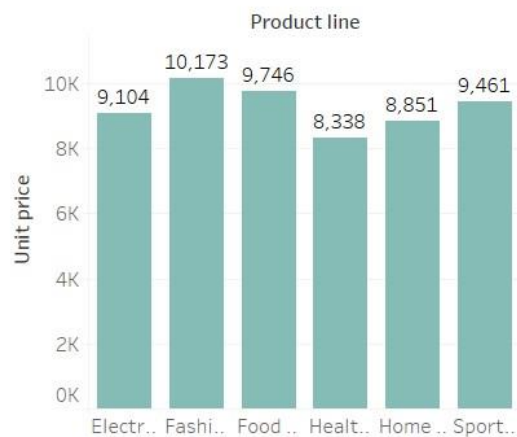**DASHBOARD:**

Product Line based on Quantity

Product line

170 178 174 152 160 166

Count of Quantity

200

150

100

50

0

Electr.. Fashi.. Food .. Healt.. Home .. Sport..

Payment method on Total Expenditure

109,993 112,207

100,767

Total Ratings of Cities

City

2,263.6 2,319.9 2,389.2

Rating

3K

2K

1K

0K

Ma.. Nay.. Yan..

Product line
- Electronic acces..
- Fashion accesso..
- Food and bevera..
- Health and beau..
- Home and lifest..
- Sports and travel

City
- Mandalay
- Naypyitaw
- Yangon

Payment
- Cash
- Credit card
- Ewallet

Total

322,967

Gross Income with respect to Supermarket Branch

Branch / Product line

| A | B | C |

Gross Income

1000

500

0

Fashion acc.. Health and .. Sports and t.. Fashion acc.. Health and .. Sports and t.. Fashion acc.. Health and .. Sports and t..

Unit Price based on Product Line

Product line

9,104 10,173 9,746 8,338 8,851 9,461

Unit price

10K

8K

6K

4K

2K

0K

Electr.. Fashi.. Food .. Healt.. Home .. Sport..

VISUALIZATIONS:

1] Analysis based on product line with respect to quantity
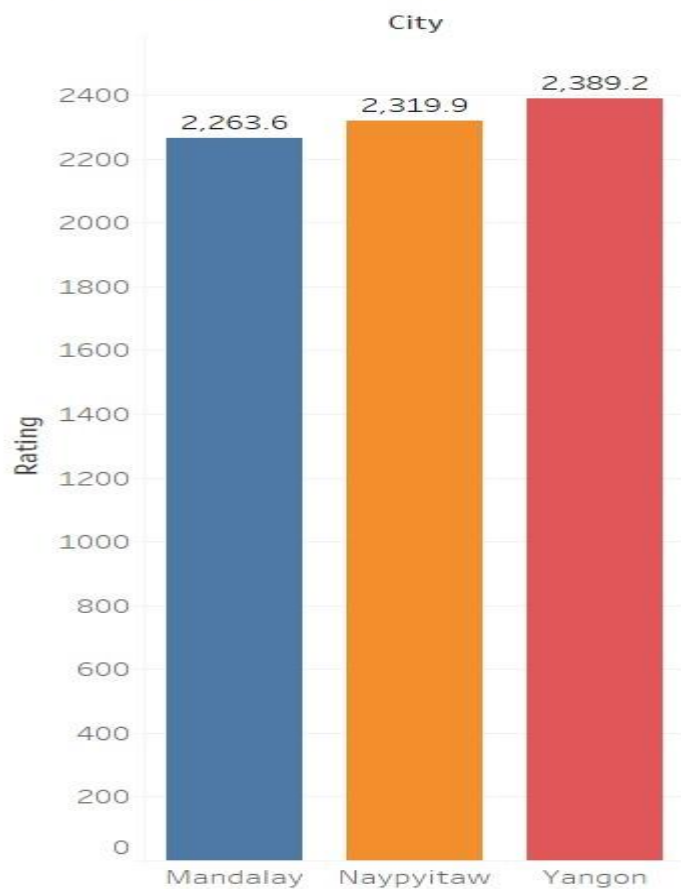

Product Line based on Quantity
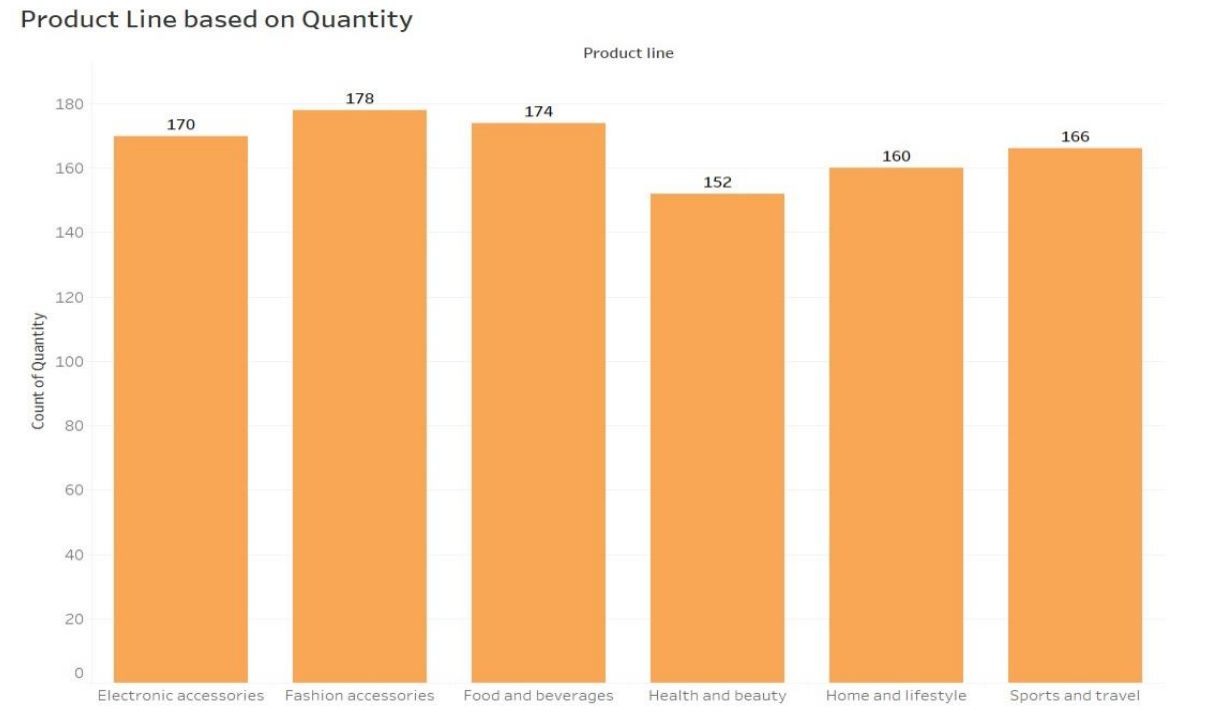
Analysis:

From the above bar graph , we can say that the count of "Fashion accessories" is the highest as compared to other product line , which is then followed by "Food and beverages" and the least is of "Health and beauty" product line.

2] Analysis based on Total Ratings with respect to city
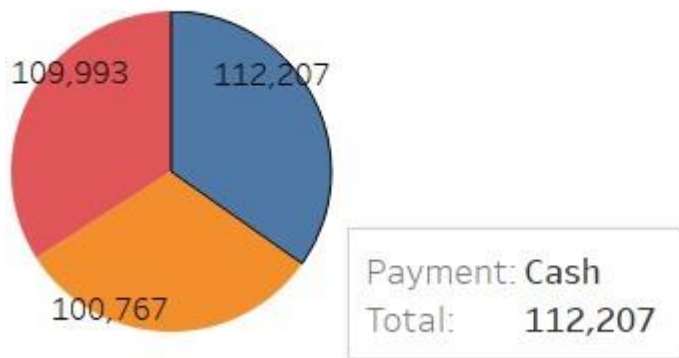
Total Ratings of Cities

Analysis:

From the above graph , the city "Yangon" has the highest rating then followed by "Naypyitaw" and the least in "Mandalay", although there is not a huge difference between the three cities.

3] Analysis based on Payment method on Total Expenditure

Payment method on Total Expenditure

109,993   112,207

100,767

Payment: **Cash**
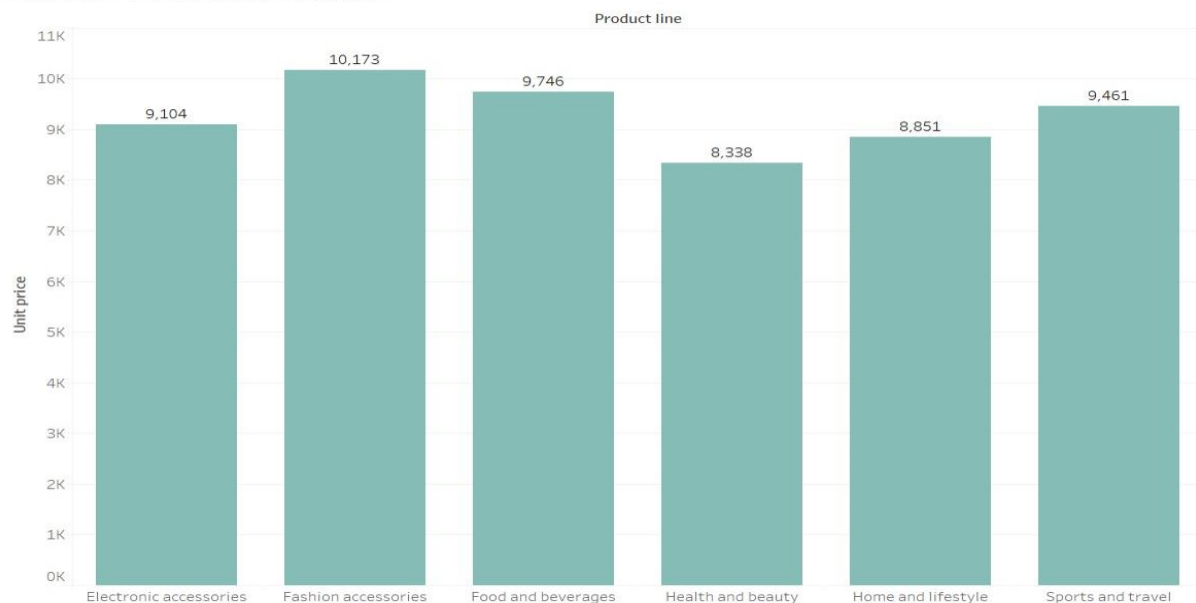Total: 112,207

Analysis:

From the above pie chart , the number of payment done in cash is highest , then followed by ewallet and then credit card

4] Analysis of Unit price based on Product Line


Unit Price based on Product Line

Product line

11K

10,173

10K   9,746   9,461

9,104   8,851

9K

8,338

8K

7K

6K

5K

4K

3K

2K

1K

0K

Electronic accessories   Fashion accessories   Food and beverages   Health and beauty   Home and lifestyle   Sports and travel

Analysis:

From the above graph , the highest unit price is of "Fashion accessories" then followed by "Food and Beverages" and least in "Health and Beauty"

5] Analysis of Gross Income with respect to branches

Gross Income with respect to Supermarket Branch
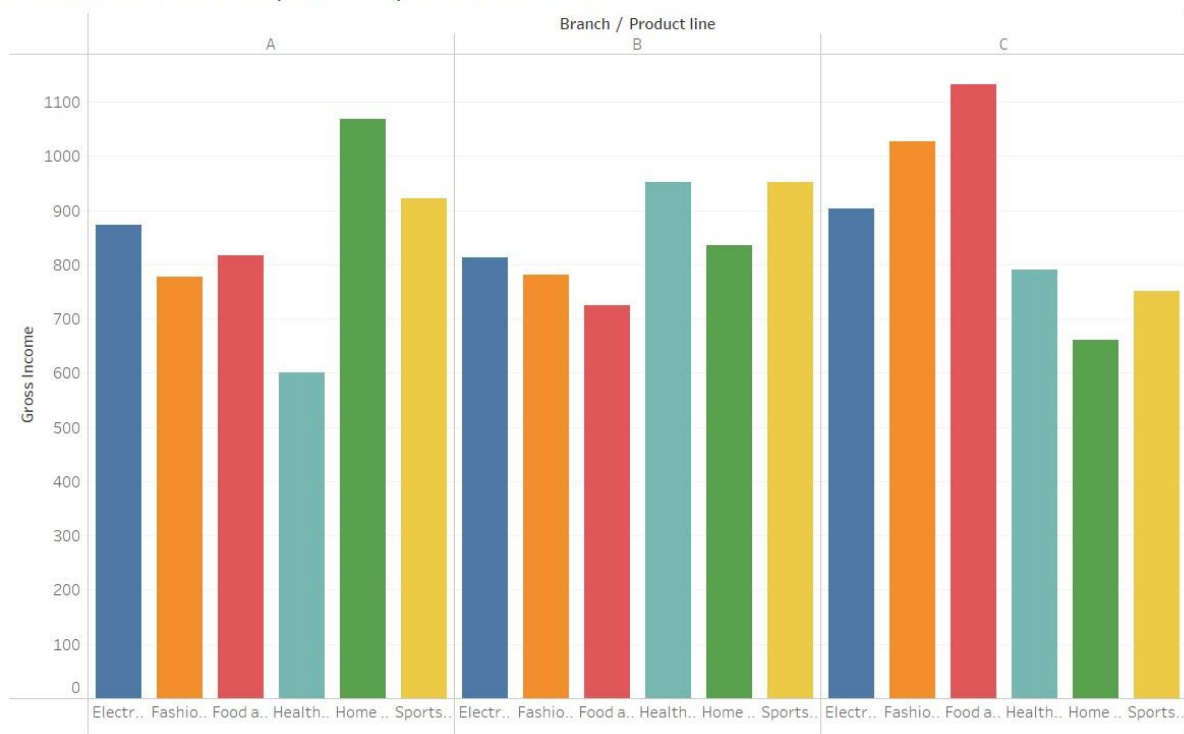
Analysis:

From the above graph, the highest gross income in branch A was through "Home and lifestyle" and in branch B by "Health and Beauty" and in branch C by " Food and Beverages" , the least out of all was in A the "Health and Beauty"

Business Intelligence:

1]   As the quantity is more for " Fashion accessories" that means the sells might be at peak , so it would be better if the supermarket focuses more on this product line but at the same time strategy for other product line as well

2]   As the "Yangon " city has the highest ratings , that means sales over here might be taking place at higher rate , so to increase the profit for the other cities, adopting the strategy by this city would be beneficial

3]   As the gross income of each branches is high for specific product line , so focusing more on those product line would boost the supermarket sales
Conclusion: Hence, we have successfully performed BI using Tableau