NEW SUPER MARKET ANALYSIS USING SQL WITH EDA

EDA ON NEW SUPERMARKET ANALYSIS USING SQL

STEP-1: Firstly, we create database in MYSQL.

STEP-2: I used our database.

STEP-3: I will import our Dataset.

STEP-4: I will analyze the dataset.

STEP-5: First, I will study the dataset.

FIELDS OF DATASETS:

Invoice ID: Computer generated sales slip - invoice identification number.

Branch: Branch of supermarket - 3 branches are available identifies by A,B,C.

City: Location of supermarket.

Customer Type: Type of customer - member - The customer using membership card
-- Normal - the customer without card.

Gender: Gender type of customer.

Product line: General item catogorization group - electronics, accessories,health & beauty, home & lifestyle,fashion accessories,sports & travel,food & beverages.

Unit Price: price of prodict.

Quantity: No.Of product purchased by customers.

Tax %: 5% tax fees for customer buying.

Total: Total price including tax.

Date: Date of purchase (record available from jan 2019 to mar 2019).

Time: purchase time 10 am - 9 pm.

Payment: Payment used by customer for purchase - 3 payment method available - cash,Ewallet,credit card.

cogs: cost of goods sold.

gross margin percentage: gross margin %.

gross income: income.

Rating: customer satisfaction rating on their overall shopping experience - on a scale1 to 10.

AFTER THE FIELDS ANALYSIS

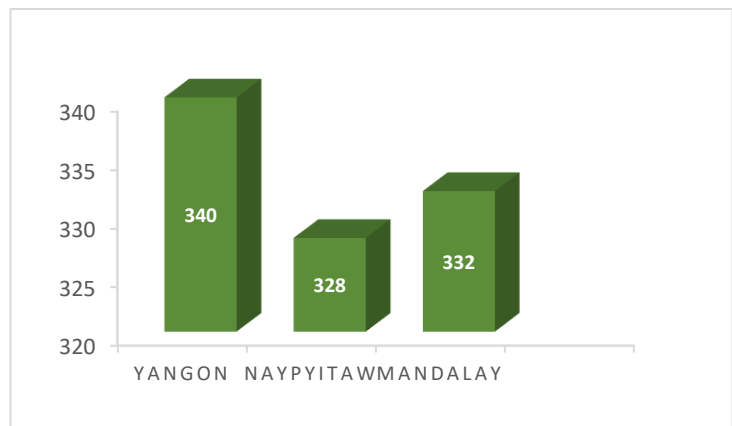**STEP-6:** I will address some important queries related to New SuperMarket's.

1) **Count the no.of Occurrences of each city.**

```
select city,count(city) from new_supermarket group by city;
```

Output: **visualistion:**

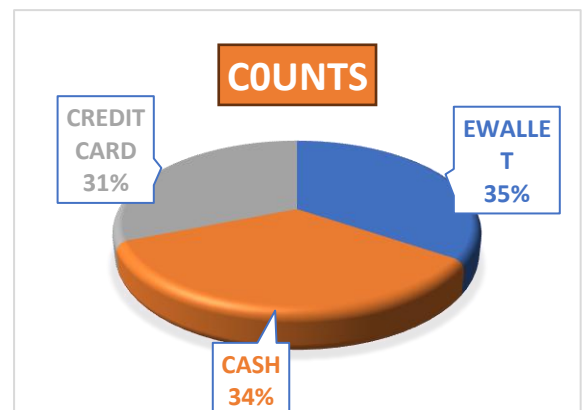| city	count(city)
Yangon	340
Naypyitaw	328
Mandalay	332

2) Find the most frequently used payment method.

select payment,count(*) from new_supermarket group by payment order by count(*) desc;

Output:

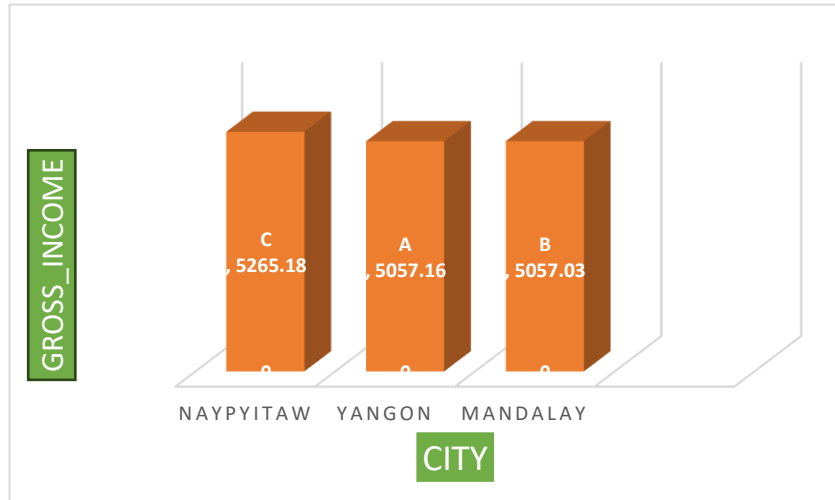| payment	count(*)
Ewallet	345
Cash	344
Credit card	311

Visualization:

3) Find the most profitable Branch as per gross income.

SELECT City,Branch,round(sum(`gross income`),2) AS Sum_Gross_Income FROM New_Supermarket
GROUP BY City ,Branch ORDER BY Sum_Gross_Income DESC;

Output :

Visualisation:

| city	branch	Gross_Income
Naypyitaw	C	5265.18
Yangon	A	5057.16
Mandalay	B	5057.03

4) **Find the most used Payment method city-Wise.**

❾ SELECT City,

sum(CASE WHEN Payment = 'Cash' THEN 1 ELSE 0 END) AS 'Cash', sum(CASE

WHEN Payment = 'Ewallet' THEN 1 ELSE 0 END) AS 'Ewallet', sum(CASE WHEN

Payment = 'Credit Card' THEN 1 ELSE 0 END) AS 'Credit Card'

FROM New_ Supermarket GROUP BY City;

Output :   ## Visualisation:

| city	cash	Ewalllet	Credit Card
Yangon	110	126	104
Naypyitaw	124	106	98
Mandalay	110	113	109
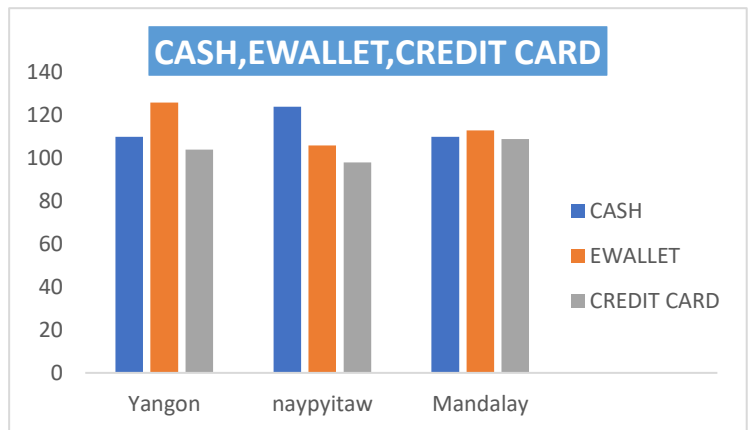
5) **Find the product line purchased in the highest Quantity.**

❼ **SELECT `Product line`,sum(Quantity) AS TotalQuantity FROM   New_Supermarket GROUP BY `Product line` ORDER BY TotalQuantity DESC;**

Output :

| product line	Total_quantity
Electronic accessories	971
Food and beverages	952
Sports and travel	920
Home and lifestyle	911
Fashion accessories	902
Health and beauty	854

Visualisation:
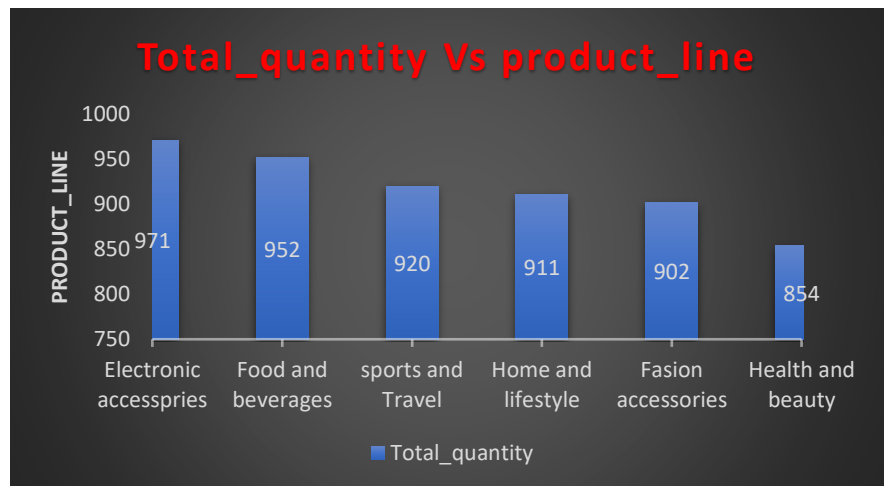
6) Find the time at which sales are highest.

❼SELECT hour(Time) AS Hour,round(sum(Total),2) AS total FROM New_Supermarket GROUP BY Hour ORDER BY total DESC;

Output :

| hour	Total
19	39699.51
13	34723.23
10	31421.48
15	31179.51
14	30828.4
11	30377.33
12	26065.88
18	26030.34
16	25226.32
17	24445.22
20	22969.53

Visualisation:
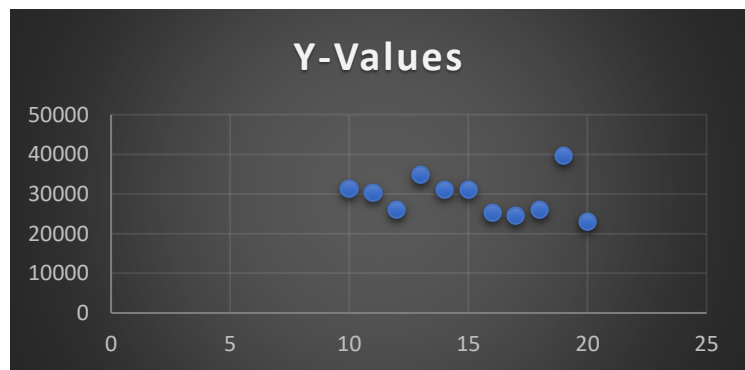
7) Display the daily sales by day of the week.

select dayname(date), dayofweek(date), sum(Total)

from new_supermarket group by dayname(Date), dayofweek(date) ;

Output:

dayname(date)	dayofweek(date)	sum(Total)
Saturday	7	56120.80949999999
Friday	6	43926.34050000002
Sunday	1	44457.892499999994
Monday	2	37899.07799999999
Thursday	5	45349.248000000014
Wednesday	4	43731.135
Tuesday	3	51482.24550000001

Vistualisation:
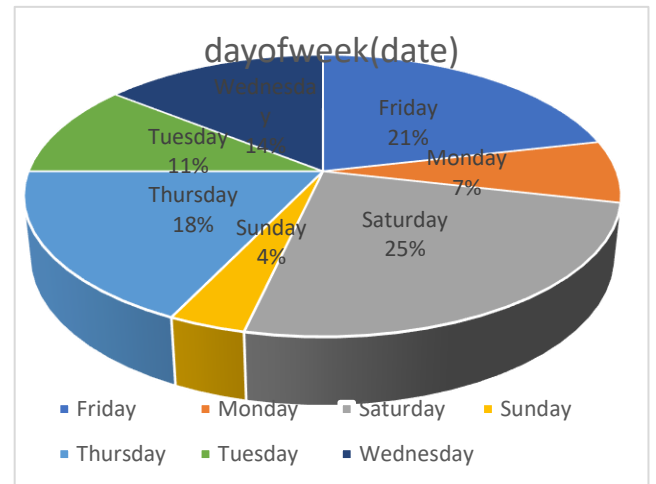
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THANK YOU