

Walmart Sales Data Analysis using MySQL

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Batch: MIP-DA-13**

DATA SETS

- **Invoice_ID** :Unique identifier for each invoice.
- **Branch** : Branch of the store were the sale took place.
- **City** : City where the store branch is located.
- **Customer_type** : Type of customer.
- **Gender** : Gender of the customer.
- **Product_line** : Category of the product sold.
- **Unit_price** : Price per unit of the product.
- **Quantity** : Quantity of the product sold.
- **Tax_5%** : Tax applied on the sale
- **Total** : Total amount of the sale.
- **Date** : Date of the transaction.
- **Time** : Time of the transaction.
- **Payment** : Payment method used.
- **cogs L**: Cost of goods sold.
- **gross_margin_percentage** : Gross income from sale.
- **gross_income** : Gross income from the sale
- **Rating** : Customer rating for the purchase.

GENERIC QUESTIONS

1. Retrieve all columns for sales made in a specific branch (e.g., Branch 'A').
2. Find the total sales for each product line.
3. List all sales transactions where the payment method was 'Cash'.
4. Calculate the total gross income generated in each city.
5. Find the average rating given by customers in each branch.
6. Determine the total quantity of each product line sold.
7. List the top 5 products by unit price.
8. Find sales transactions with a gross income greater than 30.
9. Retrieve sales transactions that occurred on weekends.
10. Calculate the total sales and gross income for each month.
11. Find the number of sales transactions that occurred after 6 PM.
12. List the sales transactions that have a higher total than the average total of all transactions.
13. Calculate the cumulative gross income for each branch by date.
15. Find the total cogs for each customer type in each city.

TABLE DESCRIPTION

Result Grid Filter Rows: Search Export: Fetch rows:

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date	Time	Payment	cogs	gross_margin_percent...	gross_income	Rating
226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.82	80.22	08-03-2019	10:29:00	Cash	76.4	4.761904762	3.82	9.6
631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	03-03-2019	13:23:00	Credit card	324.31	4.761904762	16.2155	7.4
123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8	23.288	489.048	27-01-2019	20:33:00	Ewallet	465.76	4.761904762	23.288	8.4
373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	08-02-2019	10:37:00	Ewallet	604.17	4.761904762	30.2085	5.3
699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7	29.8865	627.6165	25-03-2019	18:30:00	Ewallet	597.73	4.761904762	29.8865	4.1
355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84	6	20.652	433.692	25-02-2019	14:36:00	Ewallet	413.04	4.761904762	20.652	5.8
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	24-02-2019	11:38:00	Ewallet	735.6	4.761904762	36.78	8
665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26	2	3.626	76.146	10-01-2019	17:15:00	Credit card	72.52	4.761904762	3.626	7.2
692-92-5582	B	Mandalay	Member	Female	Food and beverages	54.84	3	8.226	172.746	20-02-2019	13:27:00	Credit card	164.52	4.761904762	8.226	5.9
351-62-0822	B	Mandalay	Member	Female	Fashion accessories	14.48	4	2.896	60.816	06-02-2019	18:07:00	Ewallet	57.92	4.761904762	2.896	4.5
529-56-3974	B	Mandalay	Member	Male	Electronic accessories	25.51	4	5.102	107.142	09-03-2019	17:03:00	Cash	102.04	4.761904762	5.102	6.8
365-64-0515	A	Yangon	Normal	Female	Electronic accessories	46.95	5	11.7375	246.4875	12-02-2019	10:25:00	Ewallet	234.75	4.761904762	11.7375	7.1
252-56-2699	A	Yangon	Normal	Male	Food and beverages	43.19	10	21.595	453.495	07-02-2019	16:48:00	Ewallet	431.9	4.761904762	21.595	8.2
829-34-3910	A	Yangon	Normal	Female	Health and beauty	71.38	10	35.69	749.49	29-03-2019	19:21:00	Cash	713.8	4.761904762	35.69	5.7
299-46-1805	B	Mandalay	Member	Female	Sports and travel	93.72	6	28.116	590.436	15-01-2019	16:19:00	Cash	562.32	4.761904762	28.116	4.5
656-95-9349	A	Yangon	Member	Female	Health and beauty	68.93	7	24.1255	506.6355	11-03-2019	11:03:00	Credit card	482.51	4.761904762	24.1255	4.6
765-26-6951	A	Yangon	Normal	Male	Sports and travel	72.61	6	21.783	457.443	01-01-2019	10:39:00	Credit card	435.66	4.761904762	21.783	6.9
329-62-1586	A	Yangon	Normal	Male	Food and beverages	54.67	3	8.2005	172.2105	21-01-2019	18:00:00	Credit card	164.01	4.761904762	8.2005	8.6
319-50-3348	B	Mandalay	Normal	Female	Home and lifestyle	40.3	2	4.03	84.63	11-03-2019	15:30:00	Ewallet	80.6	4.761904762	4.03	4.4
300-71-4605	C	Naypyitaw	Member	Male	Electronic accessories	86.04	5	21.51	451.71	25-02-2019	11:24:00	Ewallet	430.2	4.761904762	21.51	4.8
371-85-5789	B	Mandalay	Normal	Male	Health and beauty	87.98	3	13.197	277.137	05-03-2019	10:40:00	Ewallet	263.94	4.761904762	13.197	5.1
273-16-6619	B	Mandalay	Normal	Male	Home and lifestyle	33.2	2	3.32	69.72	15-03-2019	12:20:00	Credit card	66.4	4.761904762	3.32	4.4
636-48-8204	A	Yangon	Normal	Male	Electronic accessories	34.56	5	8.64	181.44	17-02-2019	11:15:00	Ewallet	172.8	4.761904762	8.64	9.9
549-59-1358	A	Yangon	Member	Male	Sports and travel	88.63	3	13.2945	279.1845	02-03-2019	17:36:00	Ewallet	265.89	4.761904762	13.2945	6
227-03-5010	A	Yangon	Member	Female	Home and lifestyle	52.59	8	21.036	441.756	22-03-2019	19:20:00	Credit card	420.72	4.761904762	21.036	8.5
649-29-6775	B	Mandalay	Normal	Male	Fashion accessories	33.52	1	1.676	35.196	08-02-2019	15:31:00	Cash	33.52	4.761904762	1.676	6.7
189-17-4241	A	Yangon	Normal	Female	Fashion accessories	87.67	2	8.767	184.107	10-03-2019	12:17:00	Credit card	175.34	4.761904762	8.767	7.7
145-94-9061	B	Mandalay	Normal	Female	Food and beverages	88.36	5	22.09	463.89	25-01-2019	19:48:00	Cash	441.8	4.761904762	22.09	9.6
848-62-7243	A	Yangon	Normal	Male	Health and beauty	24.89	9	11.2005	235.2105	15-03-2019	15:36:00	Cash	224.01	4.761904762	11.2005	7.4
871-79-8483	B	Mandalay	Normal	Male	Fashion accessories	94.13	5	23.5325	494.1825	25-02-2019	19:39:00	Credit card	470.65	4.761904762	23.5325	4.8
149-71-6266	B	Mandalay	Member	Male	Sports and travel	78.07	9	35.1315	737.7615	28-01-2019	12:43:00	Cash	702.63	4.761904762	35.1315	4.5
640-49-2076	B	Mandalay	Normal	Male	Sports and travel	83.78	8	33.512	703.752	10-01-2019	14:49:00	Cash	670.24	4.761904762	33.512	5.1
595-11-5460	A	Yangon	Normal	Male	Health and beauty	96.58	2	9.658	202.818	15-03-2019	10:12:00	Credit card	193.16	4.761904762	9.658	5.1
183-56-6882	C	Naypyitaw	Member	Female	Food and beverages	99.42	4	19.884	417.564	06-02-2019	10:42:00	Ewallet	397.68	4.761904762	19.884	7.5
232-16-2483	C	Naypyitaw	Member	Female	Sports and travel	68.12	1	3.406	71.526	07-01-2019	12:28:00	Ewallet	68.12	4.761904762	3.406	6.8
129-29-8530	A	Yangon	Member	Male	Sports and travel	62.62	5	15.655	328.755	10-03-2019	19:15:00	Ewallet	313.1	4.761904762	15.655	7
272-65-1806	A	Yangon	Normal	Female	Electronic accessories	60.88	9	27.396	575.316	15-01-2019	17:17:00	Ewallet	547.92	4.761904762	27.396	4.7

1. Retrieve all columns for sales made in a specific branch(e.g., Branch 'A')

```
1 • SELECT * FROM dbo.walmartdata
2 WHERE Branch = 'A'
```

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date
750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69	7	26.1415	548.9715	05-01-2019
631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	03-03-2019
123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8	23.288	489.048	27-01-2019
373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	08-02-2019
355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84	6	20.652	433.692	25-02-2019
665-32-9167	A	Yangon	Member	Female	Health and beauty	36.26	2	3.626	76.146	10-01-2019
365-64-0515	A	Yangon	Normal	Female	Electronic accessories	46.95	5	11.7375	246.4875	12-02-2019
252-56-2699	A	Yangon	Normal	Male	Food and beverages	43.19	10	21.595	453.495	07-02-2019
829-34-3910	A	Yangon	Normal	Female	Health and beauty	71.38	10	35.69	749.49	29-03-2019

```
1 • SELECT * FROM dbo.walmartdata
2 WHERE Branch = 'B'
```

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date
692-92-5582	B	Mandalay	Member	Female	Food and beverages	54.84	3	8.226	172.746	20-02-2019
351-62-0822	B	Mandalay	Member	Female	Fashion accessories	14.48	4	2.896	60.816	06-02-2019
529-56-3974	B	Mandalay	Member	Male	Electronic accessories	25.51	4	5.102	107.142	09-03-2019
299-46-1805	B	Mandalay	Member	Female	Sports and travel	93.72	6	28.116	590.436	15-01-2019
319-50-3348	B	Mandalay	Normal	Female	Home and lifestyle	40.3	2	4.03	84.63	11-03-2019
371-85-5789	B	Mandalay	Normal	Male	Health and beauty	87.98	3	13.197	277.137	05-03-2019
273-16-6619	B	Mandalay	Normal	Male	Home and lifestyle	33.2	2	3.32	69.72	15-03-2019
649-29-6775	B	Mandalay	Normal	Male	Fashion accessories	33.52	1	1.676	35.196	08-02-2019
145-94-9061	B	Mandalay	Normal	Female	Food and beverages	88.36	5	22.09	463.89	25-01-2019
871-79-8483	B	Mandalay	Normal	Male	Fashion accessories	94.13	5	23.5325	494.1825	25-02-2019

```
1 • SELECT * FROM dbo.walmartdata
2 WHERE Branch = 'C'
```

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date
226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.82	80.22	08-03-2019
699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7	29.8865	627.6165	25-03-2019
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	24-02-2019
300-71-4605	C	Naypyitaw	Member	Male	Electronic accessories	86.04	5	21.51	451.71	25-02-2019
183-56-6882	C	Naypyitaw	Member	Female	Food and beverages	99.42	4	19.884	417.564	06-02-2019
232-16-2483	C	Naypyitaw	Member	Female	Sports and travel	68.12	1	3.406	71.526	07-01-2019
333-73-7901	C	Naypyitaw	Normal	Female	Health and beauty	54.92	8	21.968	461.328	23-03-2019
554-53-8700	C	Naypyitaw	Member	Male	Home and lifestyle	56.11	2	5.611	117.831	02-02-2019
228-96-1411	C	Naypyitaw	Member	Female	Food and beverages	98.7	8	39.48	829.08	04-03-2019
617-15-4000	C	Naypyitaw	Member	Male	Health and beauty	15.27	2	1.527	30.537	16-02-2019

2. Find the total sales for each product line

```
1 •   SELECT Product_line, SUM(CAST(Quantity AS SIGNED)) AS total_quantity  
2     FROM dbo.walmartdata GROUP BY Product_line;
```

100% 69:1

Result Grid Filter Rows: Search Export:

Product_line	total_quant...
Health and beauty	854
Electronic accessories	971
Home and lifestyle	911
Sports and travel	920
Food and beverages	952
Fashion accessories	902

3. List all sales transactions where the payment = 'Cash'

```
1 •  SELECT * FROM dbo.walmartdata  
2 WHERE Payment ='Cash'
```

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date	Time	Payment	cogs	gross_margin.
226-31-3081	C	Naypyitaw	Normal	Female	Electronic accessories	15.28	5	3.82	80.22	08-03-2019	10:29:00	Cash	76.4	4.761904762
529-56-3974	B	Mandalay	Member	Male	Electronic accessories	25.51	4	5.102	107.142	09-03-2019	17:03:00	Cash	102.04	4.761904762
829-34-3910	A	Yangon	Normal	Female	Health and beauty	71.38	10	35.69	749.49	29-03-2019	19:21:00	Cash	713.8	4.761904762
299-46-1805	B	Mandalay	Member	Female	Sports and travel	93.72	6	28.116	590.436	15-01-2019	16:19:00	Cash	562.32	4.761904762
649-29-6775	B	Mandalay	Normal	Male	Fashion accessories	33.52	1	1.676	35.196	08-02-2019	15:31:00	Cash	33.52	4.761904762
145-94-9061	B	Mandalay	Normal	Female	Food and beverages	88.36	5	22.09	463.89	25-01-2019	19:48:00	Cash	441.8	4.761904762
848-62-7243	A	Yangon	Normal	Male	Health and beauty	24.89	9	11.2005	235.2105	15-03-2019	15:36:00	Cash	224.01	4.761904762
149-71-6266	B	Mandalay	Member	Male	Sports and travel	78.07	9	35.1315	737.7615	28-01-2019	12:43:00	Cash	702.63	4.761904762
640-49-2076	B	Mandalay	Normal	Male	Sports and travel	83.78	8	33.512	703.752	10-01-2019	14:49:00	Cash	670.24	4.761904762
777-82-7220	B	Mandalay	Member	Male	Home and lifestyle	30.12	8	12.048	253.008	03-03-2019	13:01:00	Cash	240.96	4.761904762
554-53-8700	C	Naypyitaw	Member	Male	Home and lifestyle	56.11	2	5.611	117.831	02-02-2019	10:11:00	Cash	112.22	4.761904762
354-25-5821	B	Mandalay	Member	Female	Sports and travel	69.12	6	20.736	435.456	08-02-2019	13:03:00	Cash	414.72	4.761904762
228-96-1411	C	Naypyitaw	Member	Female	Food and beverages	98.7	8	39.48	829.08	04-03-2019	20:39:00	Cash	789.6	4.761904762
617-15-4209	C	Naypyitaw	Member	Male	Health and beauty	15.37	2	1.537	32.277	16-03-2019	19:47:00	Cash	30.74	4.761904762
132-32-9879	B	Mandalay	Member	Female	Electronic accessories	93.96	4	18.792	394.632	09-03-2019	18:00:00	Cash	375.84	4.761904762
326-78-5178	C	Naypyitaw	Member	Male	Food and beverages	91.4	7	31.99	671.79	03-02-2019	10:19:00	Cash	639.8	4.761904762
162-48-8011	A	Yangon	Member	Female	Food and beverages	44.59	5	11.1475	234.0975	10-02-2019	15:10:00	Cash	222.95	4.761904762
399-46-5918	C	Naypyitaw	Normal	Female	Electronic accessories	85.98	8	34.392	722.232	28-02-2019	19:01:00	Cash	687.84	4.761904762
106-35-6779	A	Yangon	Member	Male	Home and lifestyle	44.34	2	4.434	93.114	27-03-2019	11:26:00	Cash	88.68	4.761904762
817-48-8732	A	Yangon	Member	Female	Home and lifestyle	72.35	10	36.175	759.675	20-01-2019	15:55:00	Cash	723.5	4.761904762
120-06-4233	C	Naypyitaw	Normal	Male	Electronic accessories	30.61	6	9.183	192.843	12-03-2019	20:36:00	Cash	183.66	4.761904762
853-23-2453	B	Mandalay	Member	Male	Health and beauty	75.74	4	15.148	318.108	14-02-2019	14:35:00	Cash	302.96	4.761904762
877-22-3308	A	Yangon	Member	Male	Health and beauty	15.87	10	7.935	166.635	13-03-2019	16:40:00	Cash	158.7	4.761904762
232-11-3025	A	Yangon	Normal	Male	Sports and travel	78.77	10	39.385	827.085	24-01-2019	10:04:00	Cash	787.7	4.761904762
382-03-4532	A	Yangon	Member	Female	Health and beauty	18.33	1	0.9165	19.2465	02-02-2019	18:50:00	Cash	18.33	4.761904762
796-12-2025	C	Naypyitaw	Normal	Male	Fashion accessories	62.12	10	31.06	652.26	11-02-2019	16:19:00	Cash	621.2	4.761904762

4. Calculate the total gross income generated by each city.

```
1 •  SELECT city, SUM(CAST(gross_income AS DECIMAL(10,2))) AS total_gross_income FROM dbo.walmartdata GROUP BY city;
```

0% 112:1

Result Grid Filter Rows: Search Export:

city	total_gross_inco...
Yangon	5057.36
Naypyitaw	5265.33
Mandalay	5057.36

5. Find the average rating given by the customers in each branch

```
1 •  SELECT Branch, SUM(CAST(Rating AS DECIMAL(10,2)))/COUNT(CAST(Rating AS DECIMAL(10,2))) AS average_rating  
2   FROM dbo.walmartdata GROUP BY Branch;
```

The screenshot shows a database query results window. At the top, there is a code editor with the following SQL query:

```
1 •  SELECT Branch, SUM(CAST(Rating AS DECIMAL(10,2)))/COUNT(CAST(Rating AS DECIMAL(10,2))) AS average_rating  
2   FROM dbo.walmartdata GROUP BY Branch;
```

Below the code editor is a progress bar indicating 00% completion. To the right of the progress bar is a timer showing 38:2. Below the progress bar are several buttons: "Result Grid" (highlighted), "Filter Rows:", "Search" (with a magnifying glass icon), and "Export" (with a file icon).

The main area displays a table titled "Result Grid" with the following data:

Branch	average_rating
A	7.027059
C	7.072866
B	6.818072

6. Determine the total quantity of each product line sold

```
1 •   SELECT Product_line, SUM(CAST(Quantity AS SIGNED)) AS total_quantity  
2     FROM dbo.WalmartData  
3      GROUP BY Product_line;  
4  
5
```

100% ◀ | 69:1 |

Result Grid



Filter Rows:

Search

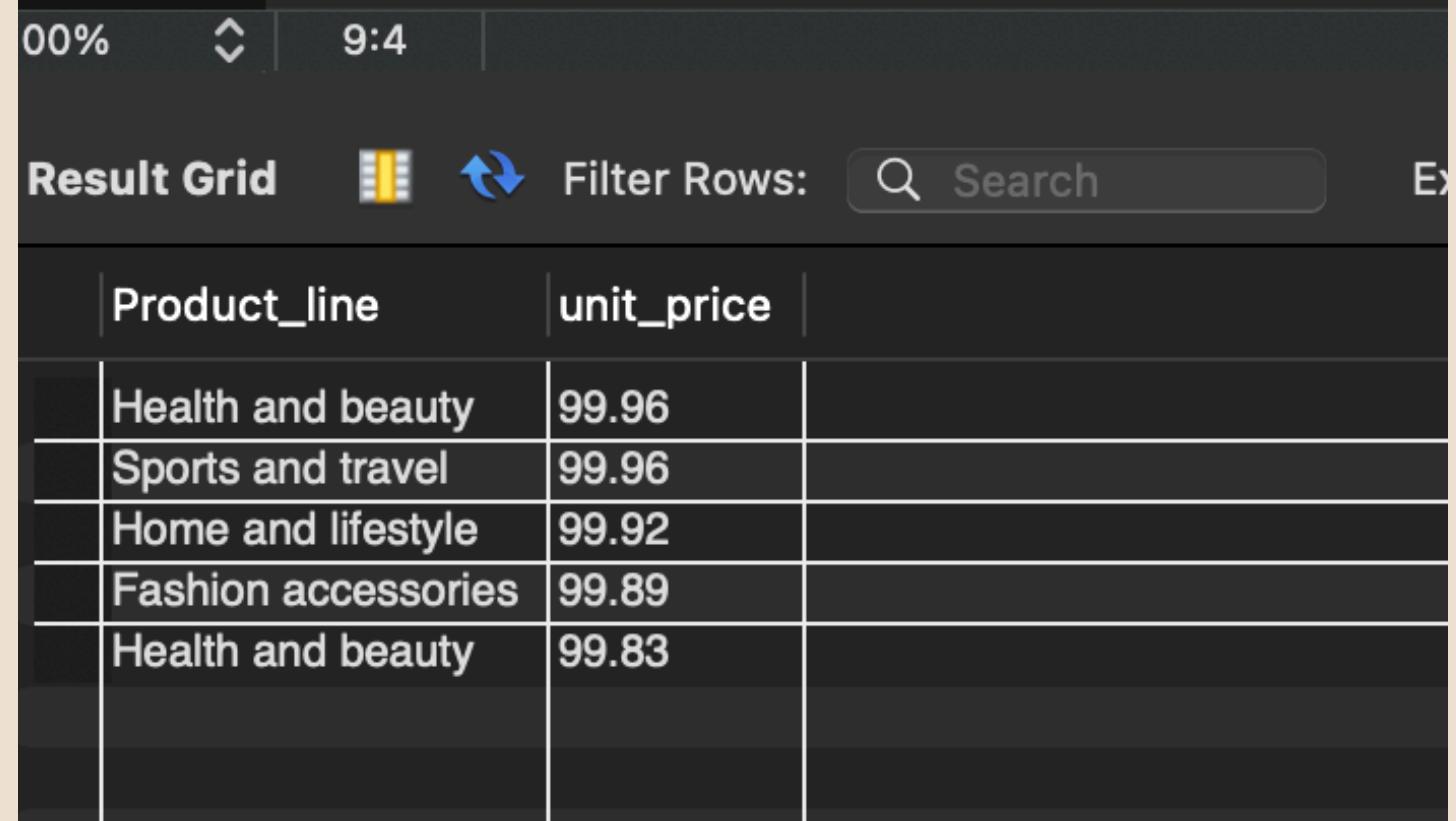
Export:



Product_line	total_quant...
Health and beauty	854
Electronic accessories	971
Home and lifestyle	911
Sports and travel	920
Food and beverages	952
Fashion accessories	902

7. List the top 5 products by unit price

```
1 •   SELECT Product_line, unit_price  
2     FROM dbo.walmartdata  
3    order by unit_price DESC  
4   LIMIT 5;
```



The screenshot shows a database query interface with the following details:

- Query ID: 1
- Progress: 00%
- Time: 9:4
- Result Grid
- Filter Rows: Search

Product_line	unit_price
Health and beauty	99.96
Sports and travel	99.96
Home and lifestyle	99.92
Fashion accessories	99.89
Health and beauty	99.83

8. Find the sales transactions with gross income greater than 30

```
1 •  SELECT * FROM dbo.walmartdata
2 WHERE CAST(gross_income AS DECIMAL(10,2))>30
```

0% 45:2

Result Grid Filter Rows: Search Export:

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date	Time	Payment	cogs	gross_margin.
373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	08-02-2019	10:37:00	Ewallet	604.17	4.761904762
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	24-02-2019	11:38:00	Ewallet	735.6	4.761904762
829-34-3910	A	Yangon	Normal	Female	Health and beauty	71.38	10	35.69	749.49	29-03-2019	19:21:00	Cash	713.8	4.761904762
149-71-6266	B	Mandalay	Member	Male	Sports and travel	78.07	9	35.1315	737.7615	28-01-2019	12:43:00	Cash	702.63	4.761904762
640-49-2076	B	Mandalay	Normal	Male	Sports and travel	83.78	8	33.512	703.752	10-01-2019	14:49:00	Cash	670.24	4.761904762
228-96-1411	C	Naypyitaw	Member	Female	Food and beverages	98.7	8	39.48	829.08	04-03-2019	20:39:00	Cash	789.6	4.761904762
574-22-5561	C	Naypyitaw	Member	Female	Fashion accessories	82.63	10	41.315	867.615	19-03-2019	17:08:00	Ewallet	826.3	4.761904762
326-78-5178	C	Naypyitaw	Member	Male	Food and beverages	91.4	7	31.99	671.79	03-02-2019	10:19:00	Cash	639.8	4.761904762
399-46-5918	C	Naypyitaw	Normal	Female	Electronic accessories	85.98	8	34.392	722.232	28-02-2019	19:01:00	Cash	687.84	4.761904762
635-40-6220	A	Yangon	Normal	Male	Health and beauty	89.6	8	35.84	752.64	07-02-2019	11:28:00	Ewallet	716.8	4.761904762
817-48-8732	A	Yangon	Member	Female	Home and lifestyle	72.35	10	36.175	759.675	20-01-2019	15:55:00	Cash	723.5	4.761904762
232-11-3025	A	Yangon	Normal	Male	Sports and travel	78.77	10	39.385	827.085	24-01-2019	10:04:00	Cash	787.7	4.761904762

9. Retrieve sales transactions that occurred on weekends

```
1 •  SELECT *
2   FROM WalmartData
3 WHERE DAYOFWEEK(STR_TO_DATE(`Date` , '%d-%m-%Y')) IN (1, 7);
4
```

100% 1:4

Result Grid Filter Rows: Search Export:

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date	Time	Payment	Order
750-67-8428	A	Yangon	Member	Female	Health and beauty	74.69	7	26.1415	548.9715	05-01-2019	13:08:00	Ewallet	1
631-41-3108	A	Yangon	Normal	Male	Home and lifestyle	46.33	7	16.2155	340.5255	03-03-2019	13:23:00	Credit card	2
123-19-1176	A	Yangon	Member	Male	Health and beauty	58.22	8	23.288	489.048	27-01-2019	20:33:00	Ewallet	3
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	24-02-2019	11:38:00	Ewallet	4
529-56-3974	B	Mandalay	Member	Male	Electronic accessories	25.51	4	5.102	107.142	09-03-2019	17:03:00	Cash	5
636-48-8204	A	Yangon	Normal	Male	Electronic accessories	34.56	5	8.64	181.44	17-02-2019	11:15:00	Ewallet	6
549-59-1358	A	Yangon	Member	Male	Sports and travel	88.63	3	13.2945	279.1845	02-03-2019	17:36:00	Ewallet	7
189-17-4241	A	Yangon	Normal	Female	Fashion accessories	87.67	2	8.767	184.107	10-03-2019	12:17:00	Credit card	8
129-29-8530	A	Yangon	Member	Male	Sports and travel	62.62	5	15.655	328.755	10-03-2019	19:15:00	Ewallet	9
333-73-7901	C	Naypyitaw	Normal	Female	Health and beauty	54.92	8	21.968	461.328	23-03-2019	13:24:00	Ewallet	10
777-82-7220	B	Mandalay	Member	Male	Home and lifestyle	30.12	8	12.048	253.008	03-03-2019	13:01:00	Cash	11
554-53-8700	C	Naypyitaw	Member	Male	Home and lifestyle	56.11	2	5.611	117.831	02-02-2019	10:11:00	Cash	12
617-15-4209	C	Naypyitaw	Member	Male	Health and beauty	15.37	2	1.537	32.277	16-03-2019	19:47:00	Cash	13
132-32-9879	B	Mandalay	Member	Female	Electronic accessories	93.96	4	18.792	394.632	09-03-2019	18:00:00	Cash	14
669-54-1719	B	Mandalay	Member	Male	Electronic accessories	18.93	6	5.679	119.259	10-02-2019	12:45:00	Credit card	15
326-78-5178	C	Naypyitaw	Member	Male	Food and beverages	91.4	7	31.99	671.79	03-02-2019	10:19:00	Cash	16

10. Calculate the total sales and gross income for each month.

```
1 •   SELECT
2       DATE_FORMAT(STR_TO_DATE(`Date` , '%d-%m-%Y') , '%Y-%m') AS `Month` ,
3       SUM(`Total`) AS `Total_Sales` ,
4       SUM(`gross_income`) AS `Total_Gross_Income`
5   FROM
6       WalmartData
7   GROUP BY
8       DATE_FORMAT(STR_TO_DATE(`Date` , '%d-%m-%Y') , '%Y-%m')
9   ORDER BY
10      `Month`;
11
12
```

100% 1:11

Result Grid Filter Rows: Search Export:

Month	Total_Sales	Total_Gross_Inco...
2019-01	116291.86800000005	5537.707999999999
2019-02	97219.37399999997	4629.494000000001
2019-03	109455.50700000004	5212.167000000006

11. Find the number of sales transaction that occurred after 6 PM.

```
1  SELECT COUNT(*) AS num_transactions  
2  FROM dbo.walmartdata  
3  WHERE TIME(Time) > '18:00:00';  
4
```

00% ◁ | 1:4

Result Grid



Filter Rows:

Search

Export:



num_transactio...
281

281

12. List the sale transactions that have a higher total than the average total of all transactions

```
1 •  SELECT *
2   FROM dbo.walmartdata
3   WHERE CAST(total AS DECIMAL(10,2)) >
4       (SELECT AVG(CAST(total AS DECIMAL(10,2))) FROM dbo.walmartdata);
5
```

0% 1:5

result Grid Filter Rows: Search Export:

Invoice_ID	Branch	City	Customer_ty...	Gender	Product_line	Unit_price	Quantity	Tax_5%	Total	Date	Time	Payment	cogs	gross_margin_
123-19-1176	A	Yangon	Normal	Male	Health and beauty	58.22	8	23.288	489.048	27-01-2019	20:33:00	Ewallet	465.76	4.761904762
373-73-7910	A	Yangon	Normal	Male	Sports and travel	86.31	7	30.2085	634.3785	08-02-2019	10:37:00	Ewallet	604.17	4.761904762
699-14-3026	C	Naypyitaw	Normal	Male	Electronic accessories	85.39	7	29.8865	627.6165	25-03-2019	18:30:00	Ewallet	597.73	4.761904762
355-53-5943	A	Yangon	Member	Female	Electronic accessories	68.84	6	20.652	433.692	25-02-2019	14:36:00	Ewallet	413.04	4.761904762
315-22-5665	C	Naypyitaw	Normal	Female	Home and lifestyle	73.56	10	36.78	772.38	24-02-2019	11:38:00	Ewallet	735.6	4.761904762
252-56-2699	A	Yangon	Normal	Male	Food and beverages	43.19	10	21.595	453.495	07-02-2019	16:48:00	Ewallet	431.9	4.761904762
829-34-3910	A	Yangon	Normal	Female	Health and beauty	71.38	10	35.69	749.49	29-03-2019	19:21:00	Cash	713.8	4.761904762
299-46-1805	B	Mandalay	Member	Female	Sports and travel	93.72	6	28.116	590.436	15-01-2019	16:19:00	Cash	562.32	4.761904762
656-95-9349	A	Yangon	Member	Female	Health and beauty	68.93	7	24.1255	506.6355	11-03-2019	11:03:00	Credit card	482.51	4.761904762
765-26-6951	A	Yangon	Normal	Male	Sports and travel	72.61	6	21.783	457.443	01-01-2019	10:39:00	Credit card	435.66	4.761904762
300-71-4605	C	Naypyitaw	Member	Male	Electronic accessories	86.04	5	21.51	451.71	25-02-2019	11:24:00	Ewallet	430.2	4.761904762
227-03-5010	A	Yangon	Member	Female	Home and lifestyle	52.59	8	21.036	441.756	22-03-2019	19:20:00	Credit card	420.72	4.761904762
145-94-9061	B	Mandalay	Normal	Female	Food and beverages	88.36	5	22.09	463.89	25-01-2019	19:48:00	Cash	441.8	4.761904762
871-79-8483	B	Mandalay	Normal	Male	Fashion accessories	94.13	5	23.5325	494.1825	25-02-2019	19:39:00	Credit card	470.65	4.761904762
149-71-6266	B	Mandalay	Member	Male	Sports and travel	78.07	9	35.1315	737.7615	28-01-2019	12:43:00	Cash	702.63	4.761904762
640-49-2076	B	Mandalay	Normal	Male	Sports and travel	83.78	8	33.512	703.752	10-01-2019	14:49:00	Cash	670.24	4.761904762
183-56-6882	C	Naypyitaw	Member	Female	Food and beverages	99.42	4	19.884	417.564	06-02-2019	10:42:00	Ewallet	397.68	4.761904762
129-29-8530	A	Yangon	Member	Male	Sports and travel	62.62	5	15.655	328.755	10-03-2019	19:15:00	Ewallet	313.1	4.761904762
272-65-1806	A	Yangon	Normal	Female	Electronic accessories	60.88	9	27.396	575.216	15-01-2019	17:17:00	Ewallet	547.92	4.761904762

Result Grid Form Editor Field Types Query Stats Execution Plan

13. Calculate the cumulative gross income for each branch by

```
1 •   SELECT branch,
2           date,
3           SUM(CAST(Gross_income AS DECIMAL(10,2)))
4                   OVER (PARTITION BY branch ORDER BY date) AS cumulative_gross_income
5   FROM dbo.walmartdata;
6
```

100% 1:6

Result Grid Filter Rows: Search Export: Fetch rows:

branch	date	cumulative_gross_inco...
A	01-01-2019	112.92
A	01-02-2019	156.35
A	01-02-2019	156.35
A	01-02-2019	156.35
A	01-03-2019	187.02
A	01-03-2019	187.02
A	01-03-2019	187.02
A	02-01-2019	201.64
A	02-01-2019	201.64
A	02-02-2019	250.22

14 .Find the total cogs for each customer type in each city

```
1 •   SELECT city,  
2           Customer_type,  
3           SUM(CAST(cogs AS DECIMAL(10,2))) AS total_cogs  
4     FROM dbo.walmartdata  
5   GROUP BY city, Customer_type;  
6
```

100% 1:6

Result Grid Filter Rows: Search Export:

city	Customer_ty...	total_cogs
Yangon	Member	51083.31
Naypyitaw	Normal	51130.88
Yangon	Normal	50059.90
Mandalay	Member	51147.32
Mandalay	Normal	49993.32
Naypyitaw	Member	54172.65

Insights

- Number of transactions occurred after 6PM =**281**.
- Naypyitaw city has highest total gross income
- Branch B has highest average rating by Customer
- Electronic accessories (Product line) has highest total sales.
- Naypyitaw (Customer type) has highest total cogs.

THANK YOU

**Presented By :Adarsh K Ramesh
Batch: MIP-DA-13**