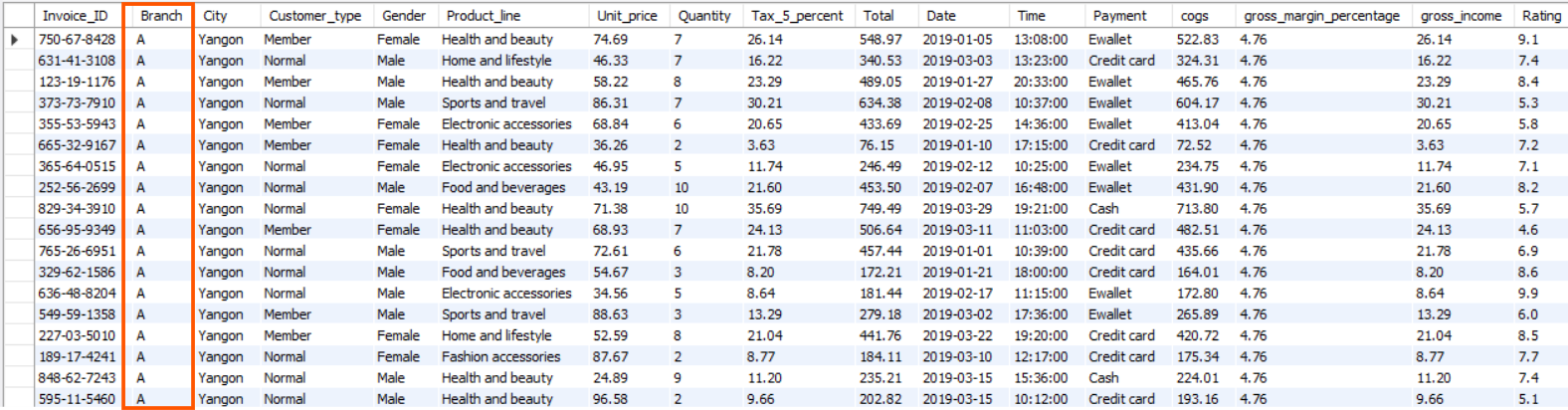
1. **Retrieve all columns for sales made in a specific branch (e.g., Branch 'A').**

SELECT \* FROM transactions

WHERE Branch = 'A';



1. **Find the total sales for each product line.**

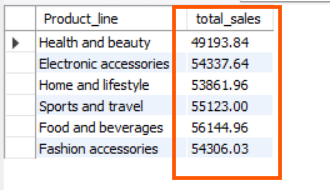
SELECT

Product\_line, ROUND(SUM(Total), 2) AS total\_sales

FROM

transactions

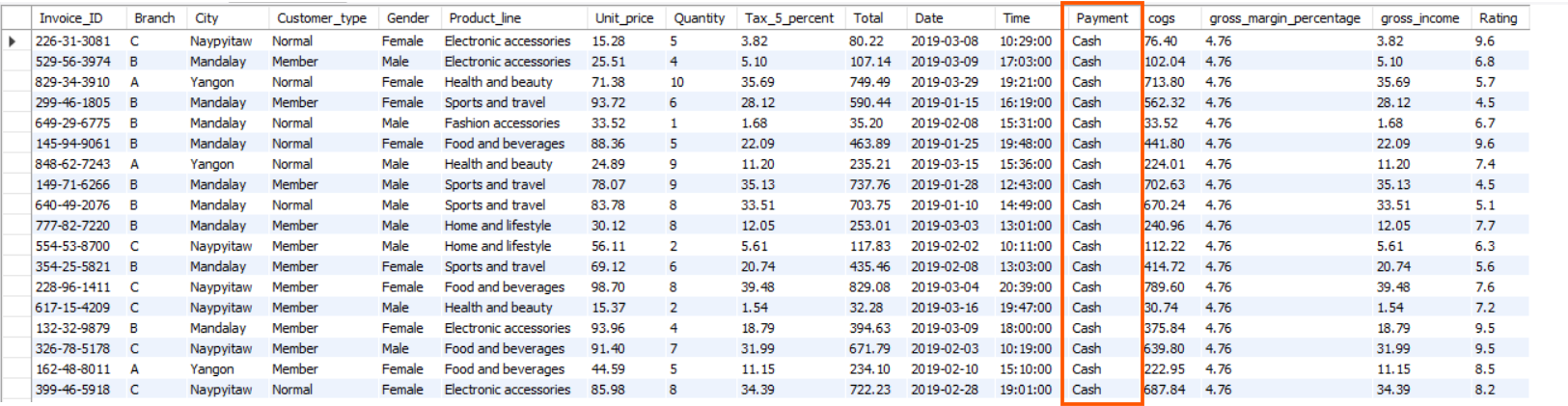
GROUP BY Product\_line;



1. **List all sales transactions where the payment method was 'Cash'.**

SELECT \* FROM transactions

where Payment='Cash';

****

**4. Calculate the total gross income generated in each city.**

SELECT City,

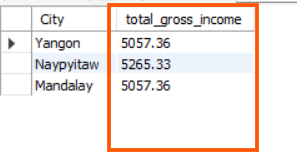
round(sum(gross\_income),2) AS total\_gross\_income

FROM

transactions

GROUP BY

City;

****

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

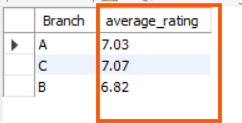
SELECT Branch,

round(avg(rating),2) AS average\_rating

FROM

transactions

GROUP BY Branch;



1. **Determine the total quantity of each product line sold.**

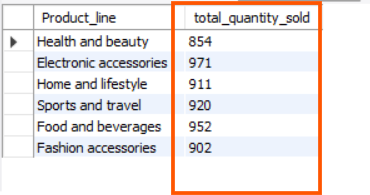
SELECT Product\_line,

sum(quantity) AS total\_quantity\_sold

FROM

transactions

GROUP BY Product\_line;



1. **List the top 5 products by unit price.**

SELECT Product\_line, Unit\_price

FROM transactions

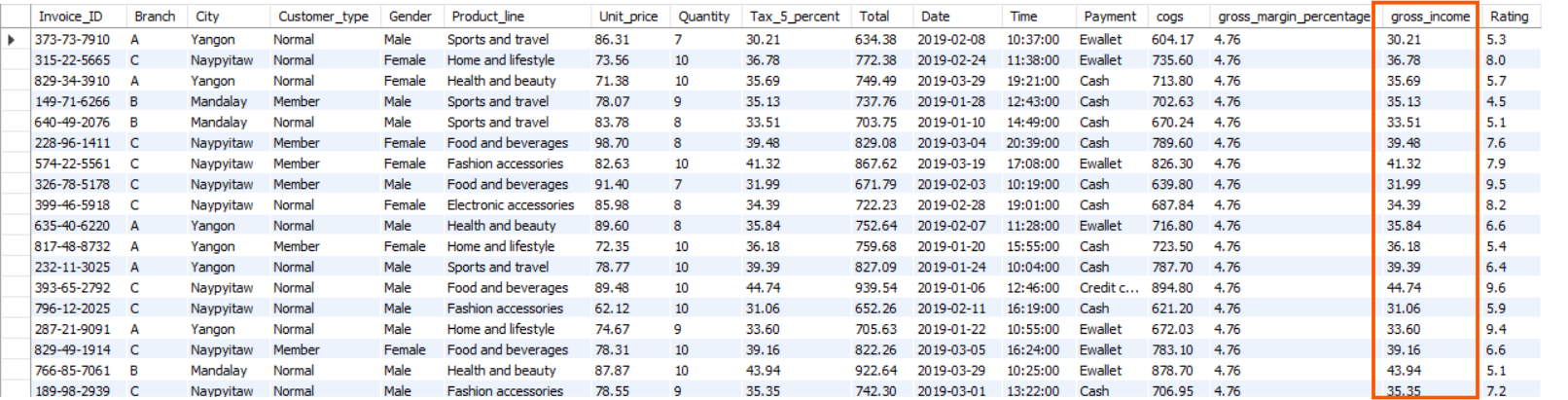
ORDER BY Unit\_price LIMIT 5;



**8.Find sales transactions with a gross income greater than 30.**

SELECT \* FROM transactions

WHERE gross\_income > 30;



**9. Retrieve sales transactions that occurred on weekends.**

SELECT \*,

CASE

WHEN DAYOFWEEK(Date) = 1 THEN 'Sunday'

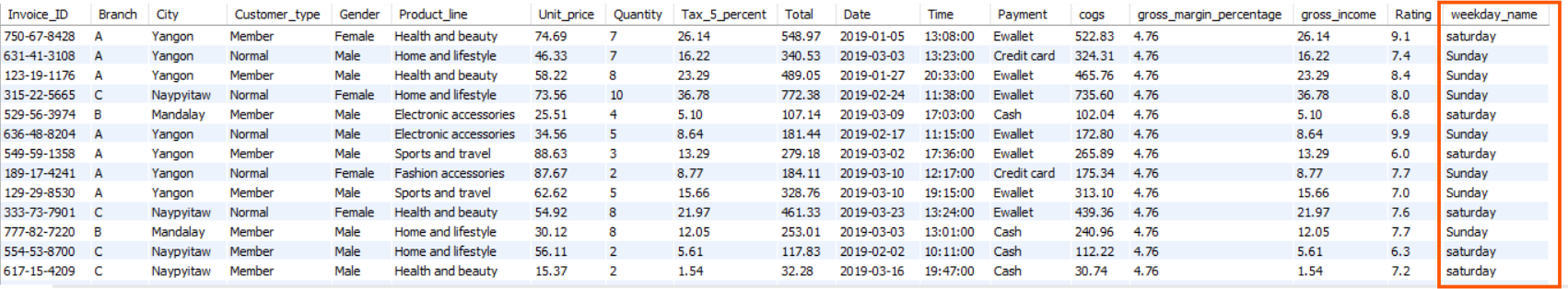
WHEN DAYOFWEEK(Date) = 7 THEN 'saturday'

END AS weekday\_name

FROM

transactions

WHERE DAYOFWEEK(Date) IN (1 , 7);

****

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

SELECT

DATE\_FORMAT(STR\_TO\_DATE(Date, '%Y-%m-%d'), '%Y-%m') AS month,

ROUND(SUM(Total), 2) AS total\_sales,

ROUND(SUM(gross\_income), 2) AS total\_gross\_income

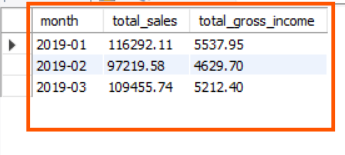
FROM

transactions

GROUP BY

DATE\_FORMAT(STR\_TO\_DATE(Date, '%Y-%m-%d'), '%Y-%m’)

ORDER BY month;



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

SELECT COUNT(\*) AS num\_transactions\_after\_6pm

FROM transactions

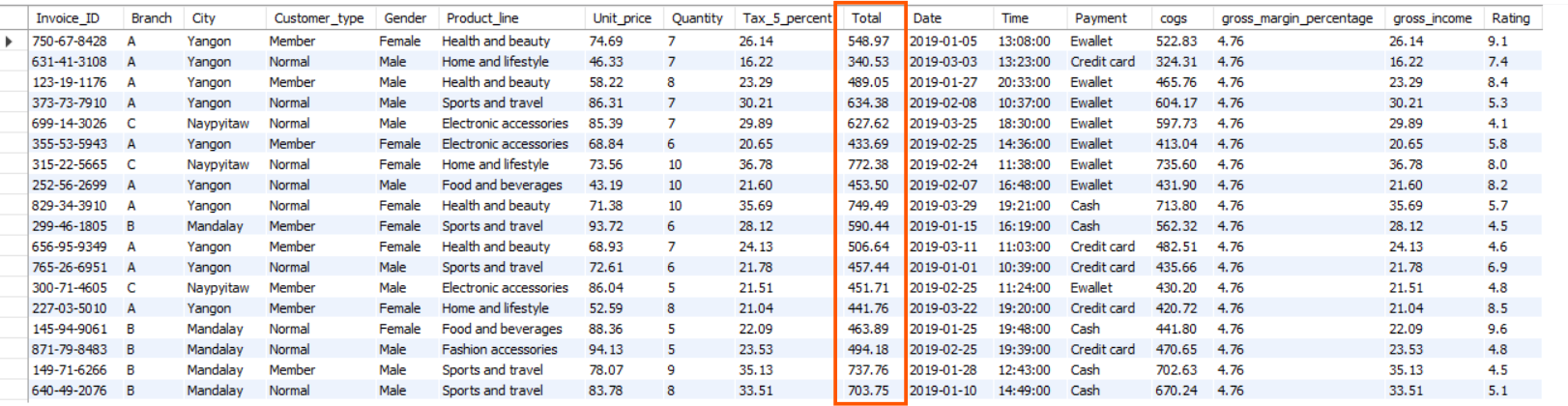
WHERE TIME(Time) > '18:00:00';



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

select \* from transactions

where Total > (SELECT avg(Total) from transactions);

****

**13. Calculate the cumulative gross income for each branch by date.**

SELECT Branch, Date,

gross\_income,

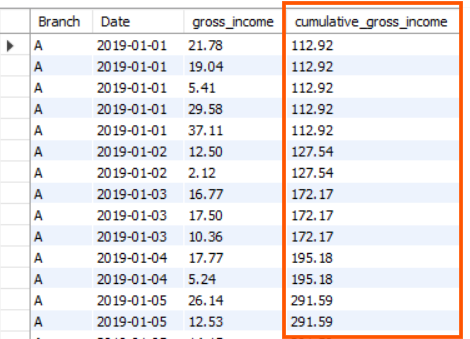
round(sum(gross\_income) OVER (PARTITION BY Branch ORDER BY Date),2)

AS cumulative\_gross\_income

FROM

transactions

ORDER BY Branch, Date;



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

SELECT city,

Customer\_type,

round(sum(cogs), 2) AS total\_cogs

FROM

transactions

GROUP BY

Customer\_type,

City;

