**Walmart Store Data Analysis**

**Data correction**

update walmart\_clean\_data

SET date = STR\_TO\_DATE(date, '%Y-%m-%d');

ALTER TABLE walmart\_clean\_data

MODIFY COLUMN date DATE;

update walmart\_clean\_data

set time = str\_to\_date(time, '%H:%i:%s');

ALTER TABLE walmart\_clean\_data

MODIFY COLUMN time time;

**-- -- Count total records:**

select count(\*) as Total\_records from walmart\_clean\_data;

**-- Count payment methods and number of transactions by payment method**

select payment\_method , count(\*) as Total\_transactions from walmart\_clean\_data

group by 1;

**-- Count distinct branches**

select \* from walmart\_clean\_data;

select count(distinct branch) from walmart\_clean\_data;

**-- -- Find the minimum quantity sold**

SELECT MIN(quantity) FROM walmart\_clean\_data;

**-- Business Problem Q1: Find different payment methods, number of transactions, and quantity sold by payment method**

select \* from walmart\_clean\_data;

select payment\_method, count(\*) as Total\_transactions, sum(quantity) as Total\_qty\_sold

from walmart\_clean\_data

group by 1;

**-- Project Question #2: Identify the highest-rated category in each branch**

**-- Display the branch, category, and avg rating**

select branch, Average\_rating , category from

(select branch, avg(rating) as Average\_rating, quantity, category from walmart\_clean\_data

group by 1,3,4

order by 3 desc limit 1) as inter;

**-- Q3: Identify the busiest day for each branch based on the number of transactions**

select \* from walmart\_clean\_data;

select Branch, count(\*) as Total\_transaction,dayofweek(date) as busiest\_Day from walmart\_clean\_data

group by 1, 3

order by 3,2 desc limit 1;

**-- Q4: Calculate the total quantity of items sold per payment method**

select payment\_method, sum(quantity) as Total\_qty\_sold from walmart\_clean\_data

group by 1;

**-- Q5: Determine the average, minimum, and maximum rating of categories for each city**

select avg(rating) as Average\_Rating,

min(rating) as Minimum\_Rating ,

max(rating) as Maximum\_Rating from walmart\_clean\_data;

SELECT

AVG(rating) AS Average\_Rating,

MIN(rating) AS Minimum\_Rating,

MAX(rating) AS Maximum\_Rating

FROM walmart\_clean\_data;

**-- -- Q6: Calculate the total profit for each category**

select \* from walmart\_clean\_data;

SELECT

category,

SUM(unit\_price \* quantity \* profit\_margin) AS total\_profit

FROM walmart\_clean\_data

GROUP BY category

ORDER BY total\_profit DESC;

SELECT

(unit\_price \* quantity \* profit\_margin) AS total\_profit

FROM walmart\_clean\_data

;

**-- Q7: Determine the most common payment method for each branch**

select payment\_method as Most\_common\_patment\_method, count(\*) as Total\_transactions from walmart\_clean\_data

group by 1 order by 2 desc limit 1;

**-- Q8: Categorize sales into Morning, Afternoon, and Evening shifts**

select \* from walmart\_clean\_data;

select case

when hour(time)<12 then 'Morning Shift'

when hour(time) between 12 and 17 then 'Afternoon Shift'

else 'Evening Shift'

end as Day\_Shift, sum(quantity) as Total\_qty\_sold from walmart\_clean\_data

group by 1;