-- 1. Customer Segmentation

-- Categorizing customers based on their spendings

create table result1 as select customer\_id, payment,

case

when payment <= 100 then 'Very low'

when payment > 100 and payment <= 250 then 'low'

when payment > 250 and payment <= 500 then 'average'

when payment > 500 and payment <= 750 then 'high'

when payment > 750 then 'very high'

end as spending\_category

from ecom\_data;

-- 2. Monthly Trend Forecasting

-- the monthly trend of sales

create table result2 as select month(timestamp) as Month, count(order\_id) Total\_Sales from ecom\_data group by month(timestamp) order by month(timestamp);

-- 3. Hourly Sales Analysis

-- Which hour has more no. of sales?

create table result3 as select hour(timestamp) as Hour, count(order\_id) Total\_Sales from ecom\_data group by hour(timestamp) order by hour(timestamp);

-- 4. Product Based Analysis

-- Which category product has sold more?

create table result4\_1 as select product\_category, count(order\_id) as Total\_orders from ecom\_data group by product\_category;

-- Which category product has more rating?

create table result4\_2 as select product\_category, sum(rating) as Total\_Rating from ecom\_data group by product\_category;

-- Which product has sold more?

create table result4\_3 as select product\_id, count(order\_id) as Total\_Sales from ecom\_data group by product\_id;

-- Top 10 highest & least product rating?

create table result4\_4 as select product\_category Highest\_Rated\_Product, sum(rating) as Total\_Rating from ecom\_data group by product\_category order by Total\_Rating desc limit 10;

create table result4\_5 as select product\_category as Lowest\_Rated\_Product, sum(rating) as Total\_Rating from ecom\_data group by product\_category order by Total\_Rating limit 10;

-- Order Count for each rating

create table result4\_6 as select rating, count(order\_id) as Total\_Orders from ecom\_data group by rating order by rating;

-- 5. Payment Preference

-- What are the most commonly used payment types?

create table result5\_1 as select payment\_type, count(order\_id) as Total\_Orders from ecom\_data group by payment\_type;

-- Count of Orders With each No. of Payment Installments

create table result5\_2 as select payment\_installments, count(order\_id) as Total\_Orders from ecom\_data group by payment\_installments order by payment\_installments;

-- 6. Potential Customer's Location

create table result6\_1 as select customer\_state, customer\_city, count(order\_id) as Total\_Orders from ecom\_data group by customer\_state, customer\_city order by Total\_Orders desc limit 10;

-- Where do most customers come from?

create table result6\_2 as select customer\_state, customer\_city, count(customer\_id) as Total\_Customers from ecom\_data group by customer\_state, customer\_city order by Total\_Customers desc limit 10;

-- 7. Seller Rating

-- Which seller sold more?

create table result7\_1 as select seller\_id, count(order\_id) as Total\_Sales from ecom\_data group by seller\_id order by Total\_Sales desc limit 10;

-- Which seller got more rating?

create table result7\_2 as select seller\_id, sum(rating) as Total\_Rating from ecom\_data group by seller\_id order by Total\_Rating desc limit 10;

-- 8. Logistics based Optimization Insights

-- Which city buys heavy weight products and low weight products?

create table result8\_1 as with cte as(

select avg(product\_weight\_g) as aw from ecom\_data

)

select customer\_city, count(order\_id) as Total\_Heavy\_weight\_Products from ecom\_data

where product\_weight\_g > (select aw from cte)+((select aw from cte)/2)

group by customer\_city order by Total\_Heavy\_weight\_Products desc;

create table result8\_2 as with cte as(

select avg(product\_weight\_g) as aw from ecom\_data

)

select customer\_city, count(order\_id) as Total\_Low\_Weight\_Products from ecom\_data

where product\_weight\_g < (select aw from cte)-((select aw from cte)/2)

group by customer\_city order by Total\_Low\_Weight\_Products desc;

-- How much products sold within seller state?

create table result8\_3 as select count(product\_id) as Total\_Products\_Sold\_Within\_Seller\_State from ecom\_data where customer\_state = seller\_state;



































