**QUESTIONS AND ANSWERS ON**

**On EVMarket Analysis**

**1.Find the manufacturer with the highest revenue in 2023 across all models?**

select M.manufacturer\_name,MA.model\_name,S.year,sum(S.revenue\_usd) as Highest\_revenue\_2023 from ev\_manufacturers M

join ev\_models MA on M.manufacturer\_id=MA.manufacturer\_id

join sales\_data S on MA.model\_id=S.model\_id

WHERE S.year=2023

group by M.manufacturer\_name,MA.model\_name,S.year

order by Highest\_revenue\_2023 desc

limit 1;

**2.Identify the top 3 models with the longest range per dollar (range per USD)?**

select MA.model\_name,(range\_km / price\_usd) AS range\_per\_dollar from ev\_manufacturers M

join ev\_models MA on M.manufacturer\_id=MA.manufacturer\_id

order by range\_per\_dollar desc

limit 3;

**3.Find the country with the highest average battery capacity across all EV models sold in 2023?**

select S.country, avg(battery\_capacity\_kWh) as avg\_battery\_capacity from ev\_models Ev

join sales\_data S on Ev.model\_id=S.model\_id where S.year=2023

group by S.country

order by avg\_battery\_capacity desc

limit 1

**#4.Retrieve the models that generated more than $1 billion in revenue in 2023 but sold fewer than 40,000 units?**

**#1000000000**

select MA.model\_name,S.units\_sold, S.revenue\_usd from ev\_models MA

join sales\_data S on MA.model\_id=S.model\_id

where revenue\_usd>1000000000 AND units\_sold<40000 AND S.year=2023;

**5.Find the total revenue generated by each manufacturer and rank the manufacturers based on their revenue using window functions?**

select M.manufacturer\_name,MA.model\_name,S.year,sum(S.revenue\_usd) as Highest\_revenue\_2023,

RANK() OVER (order by sum(S.revenue\_usd)) as Revenue\_rank

from ev\_manufacturers M

join ev\_models MA on M.manufacturer\_id=MA.manufacturer\_id

join sales\_data S on MA.model\_id=S.model\_id

group by M.manufacturer\_name,MA.model\_name,S.year

order by Highest\_revenue\_2023 ;

**6.Retrieve the models whose revenue in 2023 was above the average revenue of all models that year (using subquery)?**

select MA.model\_name,S.year,S.revenue\_usd from

ev\_models MA

join sales\_data S on MA.model\_id=S.model\_id

WHERE S.year=2023 and S.revenue\_usd>(select avg(S.revenue\_usd) as Avg\_revenue from sales\_data S);

**7. Create a view to display the top 5 cities with the highest charging station capacity in 2023?**

create View highest\_charging\_station as

select city,country,total\_capacity\_kWh from charging\_stations

where year=2023

order by total\_capacity\_kWh desc

limit 5;

select \* from highest\_charging\_station;

**8.Classify countries based on their EV units sold in 2023: 'High' if units sold are more than 40,000, 'Medium' if between 20,000 and 40,000, and 'Low' if less than 20,000.**

select country,sum(units\_sold),

case

when sum(units\_sold)>40000 then "High"

when sum(units\_sold) between 20000 and 40000 then "Medium"

when sum(units\_sold)<20000 then "Low"

end as

"Total\_Units\_Sold" from sales\_data

where year=2023

group by country;

**9.Find the models that have a higher range (in kilometers) than the average range of all EV models?**

SELECT model\_name,range\_km FROM ev\_models

where range\_km>(select avg(range\_km) from ev\_models);

**10.Classify EV models based on their price: 'Luxury' for prices above $70,000, 'Premium' for prices between $50,000 and $70,000, and 'Standard' for prices below $50,000?**

select model\_name,

case

when price\_usd>70000 then "Luxury"

when price\_usd between 50000 and 700000 then "Premium"

when price\_usd<50000 then "Standard"

end as

"price\_category"

FROM ev\_models;