Tables

Here are the tables you will be using

sales

sale_id	car_id	salesman_id	purchase_date
1	1	1	2021-01-01
2	3	3	2021-02-03
3	2	2	2021-02-10
4	5	4	2021-03-01
5	8	1	2021-04-02
6	2	1	2021-05-05
7	4	2	2021-06-07
8	5	3	2021-07-09
9	2	4	2022-01-01
10	1	3	2022-02-03
11	8	2	2022-02-1-
12	7	2	2022-03-01
13	5	3	2022-04-02
14	3	1	2022-05-05
15	5	4	2022-06-07
16	1	2	2022-07-09
17	2	3	2023-01-01
18	6	3	2023-02-03
19	7	1	2023-02-10
20	4	4	2023-03-01

cars

car_id	make	type	style	cost_$
1	Honda	Civic	Sedan	30000
2	Toyota	Corolla	Hatchback	25000
3	Ford	Explorer	SUV	40000
4	Chevrolet	Camaro	Coupe	36000
5	BMW	X5	SUV	55000
6	Audi	A4	Sedan	48000
7	Mercedes	C-Class	Coupe	60000
8	Nissan	Altima	Sedan	26000

salespersons

salesman_id	name	age	city
1	John Smith	28	New York
2	Emily Wong	35	San Fran
3	Tom Lee	42	Seattle
4	Lucy Chen	31	LA

1. What are the details of all cars purchased in the year 2022?
2. What is the total number of cars sold by each salesperson?
3. What is the total revenue generated by each salesperson?
4. What are the details of the cars sold by each salesperson?
5. What is the total revenue generated by each car type?
6. What are the details of the cars sold in the year 2021 by salesperson 'Emily Wong'?
7. What is the total revenue generated by the sales of hatchback cars?
8. What is the total revenue generated by the sales of SUV cars in the year 2022?
9. What is the name and city of the salesperson who sold the most number of cars in the year 2023?
10. What is the name and age of the salesperson who generated the highest revenue in the year 2022?

```
75
76 •  select c.car_id ,make, type,cost_, year(purchase_date) as purchase_year
77     from cars c
78     join sales s
79     on c.car_id = s.car_id
80     where year(purchase_date) = 2022
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

car_id	make	type	cost_	purchase_year
1	Honda	Civic	30000	2022
1	Honda	Civic	30000	2022
2	Toyota	Corolla	25000	2022
3	Ford	Explorer	40000	2022
5	BMW	X5	55000	2022
5	BMW	X5	55000	2022
7	Mercedes	C-Class	60000	2022
8	Nissan	Altima	26000	2022

Result 7

```sql
-- 2 What is the total number of cars sold by each salesperson?

select name as salesperson,count(car_id) as total_cars_sold
from salespersons sp
join sales s
on sp.salesman_id = s.salesman_id
group by name ;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

salesperson	total_cars_sold
John Smith	5
Emily Wong	5
Tom Lee	6
Lucy Chen	4

```sql
-- 3 What is the total revenue generated by each salesperson?

select name , sum(cost_)
from cars c
join sales s
on c.car_id = s.car_id
join salespersons sp
on s.salesman_id=sp.salesman_id
group by name
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name	sum(cost_)
John Smith	181000
Emily Wong	177000
Tom Lee	253000
Lucy Chen	171000

```sql
-- 4  What are the details of the cars sold by each salesperson?

select s.salesman_id,c.car_id,make,type,style,cost_ ,name as sold_by
from cars c
join sales s
on c.car_id = s.car_id
join salespersons sp
on s.sale_id =s.sale_id;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

salesman_id	car_id	make	type	style	cost_	sold_by
1	1	Honda	Civic	Sedan	30000	Lucy Chen
1	1	Honda	Civic	Sedan	30000	Tom Lee
1	1	Honda	Civic	Sedan	30000	Emily Wong
1	1	Honda	Civic	Sedan	30000	John Smith
3	3	Ford	Explorer	SUV	40000	Lucy Chen
3	3	Ford	Explorer	SUV	40000	Tom Lee
3	3	Ford	Explorer	SUV	40000	Emily Wong
3	3	Ford	Explorer	SUV	40000	John Smith
2	2	Toyota	Corolla	Hatchback	25000	Lucy Chen

Result 13

```sql
-- 5  What is the total revenue generated by each car type?

select type ,sum(cost_)
from cars c
join sales s using (car_id)
group by type
order by 2 desc
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

type	sum(cost_)
X5	220000
C-Class	120000
Corolla	100000
Civic	90000
Explorer	80000
Camaro	72000
Altima	52000
A4	48000

```sql
-- 6 What are the details of the cars sold in the year 2021 by salesperson 'Emily Wong'?

select c.car_id,make,type,style,cost_ ,name ,year(purchase_date)
from cars c
join sales s using (car_id)
join salespersons sp
using (salesman_id)
where name = 'Emily Wong' and year(purchase_date) = 2021
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

car_id	make	type	style	cost_	name	year(purchase_date)
2	Toyota	Corolla	Hatchback	25000	Emily Wong	2021
4	Chevrolet	Camaro	Coupe	36000	Emily Wong	2021

Result 18

```sql
-- 7 What is the total revenue generated by the sales of hatchback cars?
select STYLE ,sum(cost_) AS TOTAL_REVENUE
from cars c
join sales s
using ( car_id )
where STYLE = 'Hatchback'
group by 1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

STYLE	TOTAL_REVENUE
Hatchback	100000

```sql
-- 8 . What is the total revenue generated by the sales of SUV cars in the year 2022?

select STYLE ,sum(cost_) AS TOTAL_REVENUE
from cars c
join sales s
using ( car_id )
where STYLE = 'SUV' AND year(purchase_date) = 2022
group by 1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

STYLE	TOTAL_REVENUE
SUV	150000

```sql
-- 9 What is the name and city of the salesperson who sold the most number of cars in the year 2023?

select name ,city, count(s.car_id) as total_cars_sold
 from salespersons sp
join sales s
using (salesman_id)
where year(purchase_date) = '2023'
group by  1,2
order by 3 desc
limit 1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

name	city	total_cars_sold
Tom Lee	Seattle	2

```sql
-- 10 What is the name and age of the salesperson who generated the highest revenue in the year 2022?

select name,age ,sum(cost_) as revenue_generated
from salespersons sp
join sales s
using (salesman_id)
join cars c
using (car_id)
where year(purchase_date) = 2022
group by name, age
order by 3 desc
limit 1
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

name	age	revenue_generated
Emily Wong	35	116000