Challenge 1 - Steve's Car Showroom

Intro

Steve runs a top-end car showroom but his data analyst has just quit and left him without his crucial insights.

Can you analyse the following data to provide him with all the answers he requires?

Tables :

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

Questions

1. What are the details of all cars purchased in the year 2022?

```
71
72    #Q1. What are the details of all cars purchased in the year 2022?
73    SELECT cars.car_id,cars.make,cars.type,cars.style,cars.cost_$,Year(sales.purchase_date) AS Purchase_year FROM cars
74    INNER JOIN sales
75    ON cars.car_id = sales.car_id
76    WHERE YEAR(purchase_date) = '2022';
77
78
```

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

car_id	make	type	style	cost_$	Purchase_year
1	Honda	Civic	Sedan	30000	2022
1	Honda	Civic	Sedan	30000	2022
2	Toyota	Corolla	Hatchback	25000	2022
3	Ford	Explorer	SUV	40000	2022
5	BMW	X5	SUV	55000	2022
5	BMW	X5	SUV	55000	2022
7	Mercedes	C-Class	Coupe	60000	2022
8	Nissan	Altima	Sedan	26000	2022

Result 20 | Read Only

2. What is the total number of cars sold by each salesperson?

SQL_Project_On_Mavenmovies... | Employee_attrition_project | IG Clone Project* | netflix_project | SQL File 8* | SQL File 8*

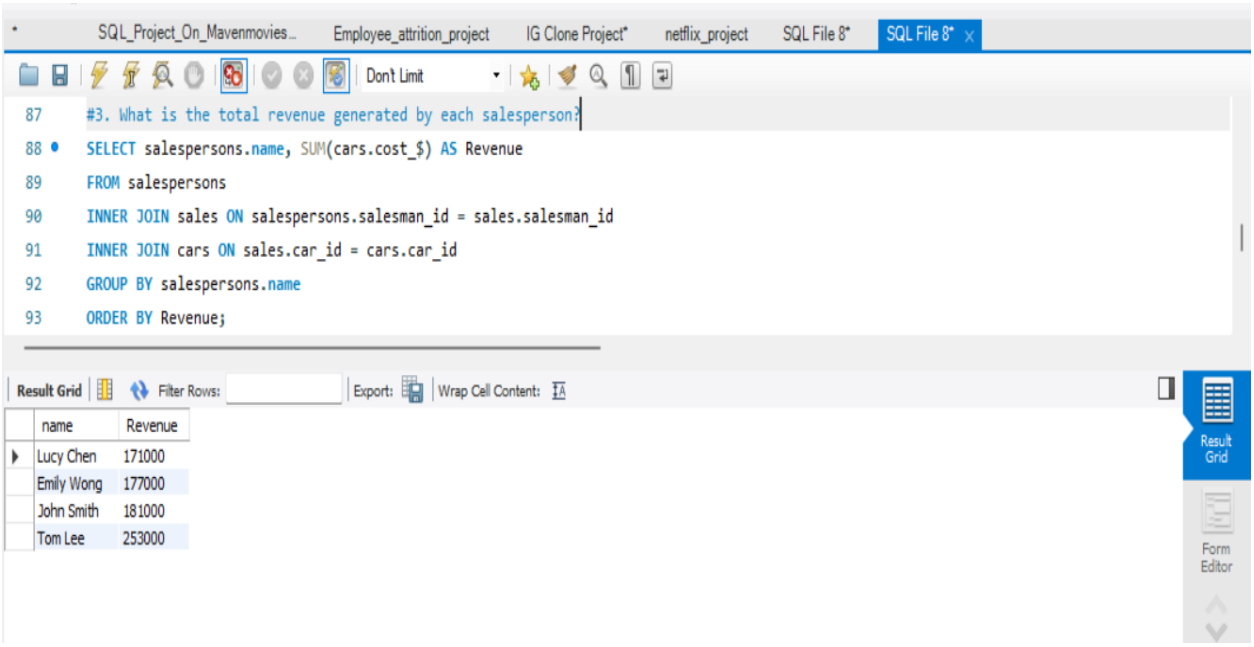
Don't Limit

```
79    #Q2. What is the total number of cars sold by each salesperson?
80    SELECT salespersons.name AS Salesman, COUNT(sales.salesman_id) AS Cars_sold
81    FROM salespersons
82    INNER JOIN sales ON salespersons.salesman_id = sales.salesman_id
83    GROUP BY salespersons.name
84    ORDER BY Cars_sold DESC;
85
```

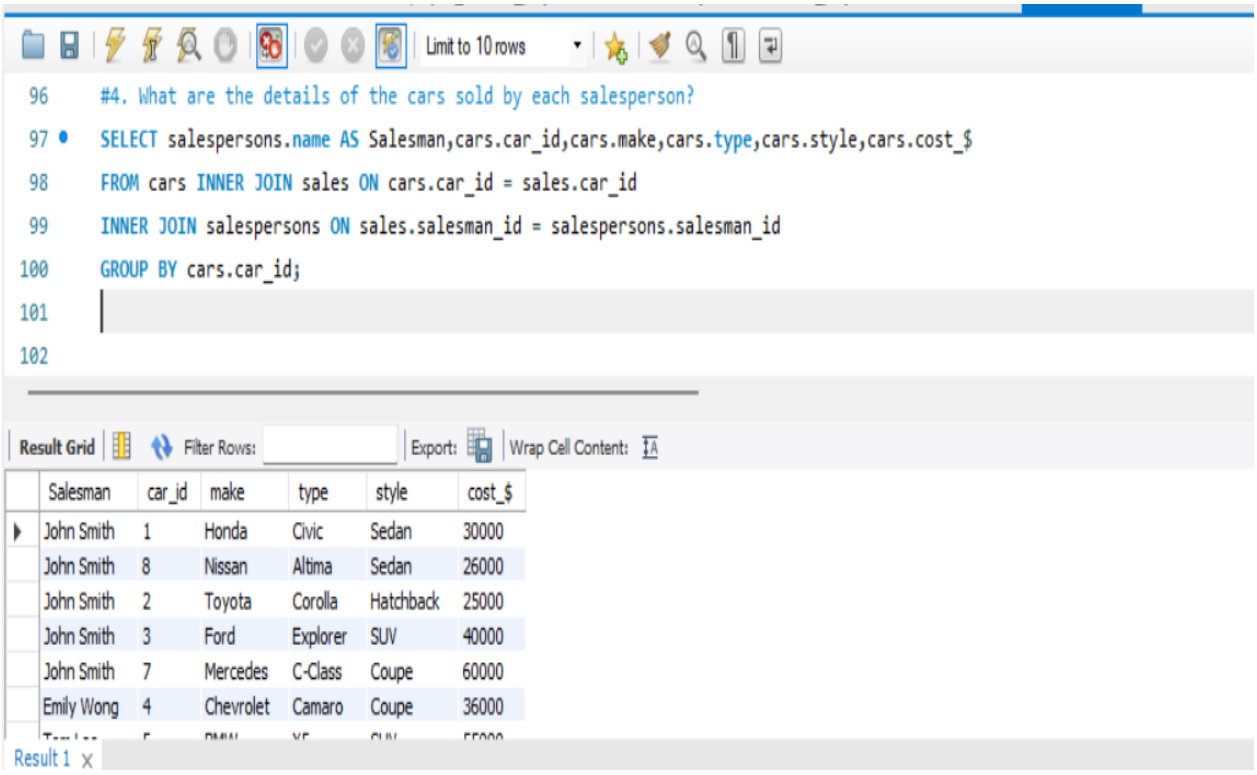
Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Salesman	Cars_sold
Tom Lee	6
John Smith	5
Emily Wong	5
Lucy Chen	4

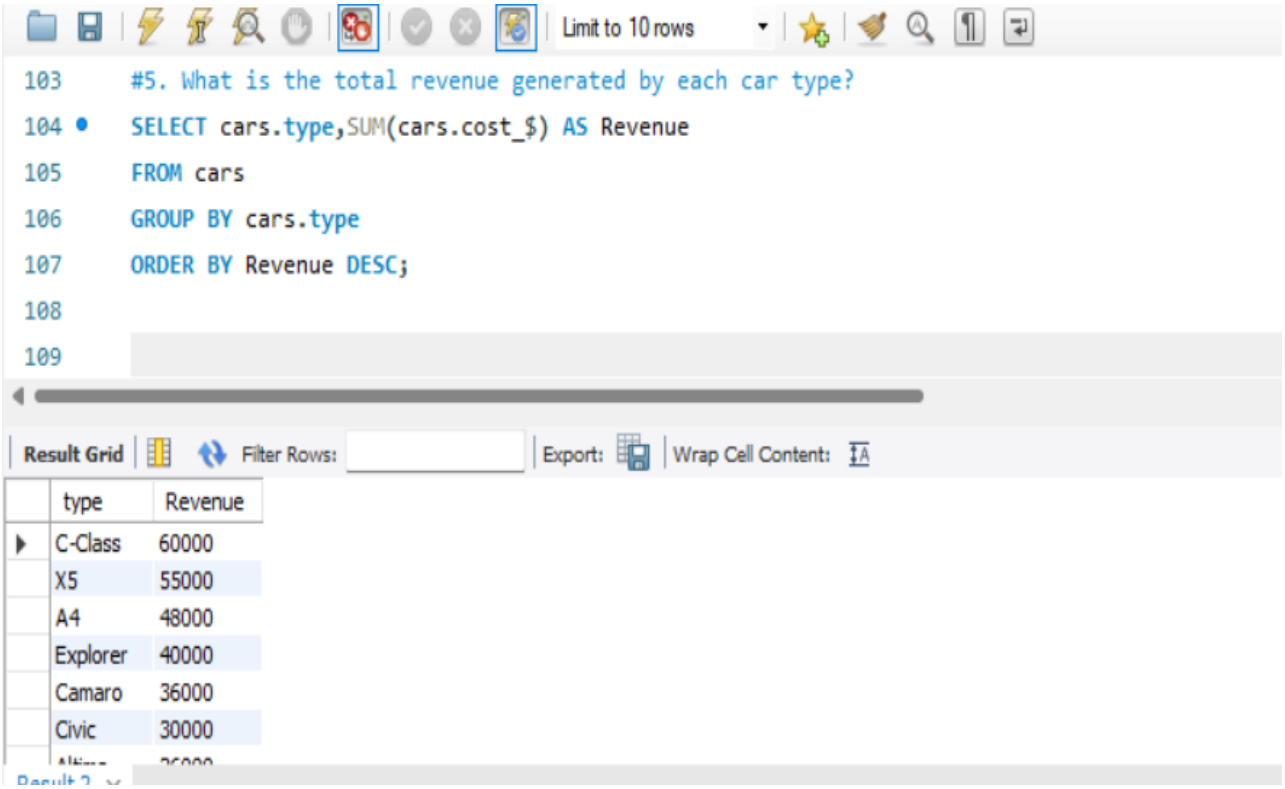
3. What is the total revenue generated by each salesperson?



4. What are the details of the cars sold by each salesperson?



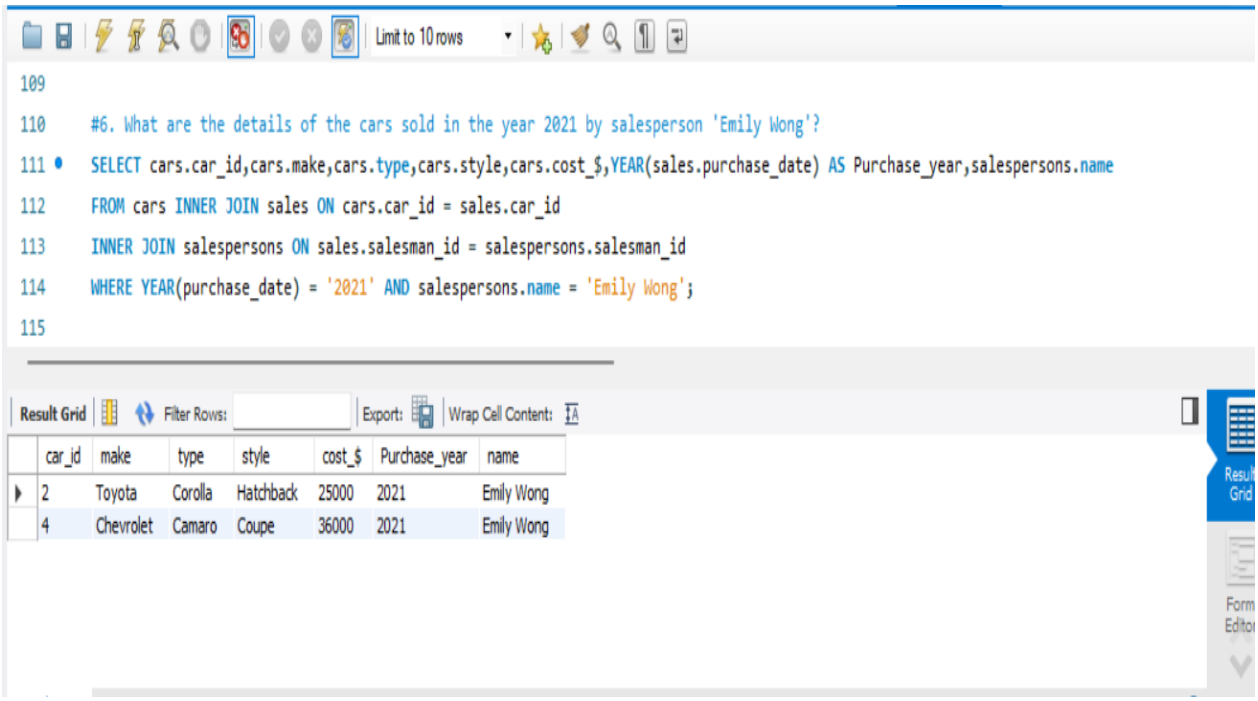
5. What is the total revenue generated by each car type?



```
#5. What is the total revenue generated by each car type?
SELECT cars.type,SUM(cars.cost_$) AS Revenue
FROM cars
GROUP BY cars.type
ORDER BY Revenue DESC;
```

type	Revenue
C-Class	60000
X5	55000
A4	48000
Explorer	40000
Camaro	36000
Civic	30000

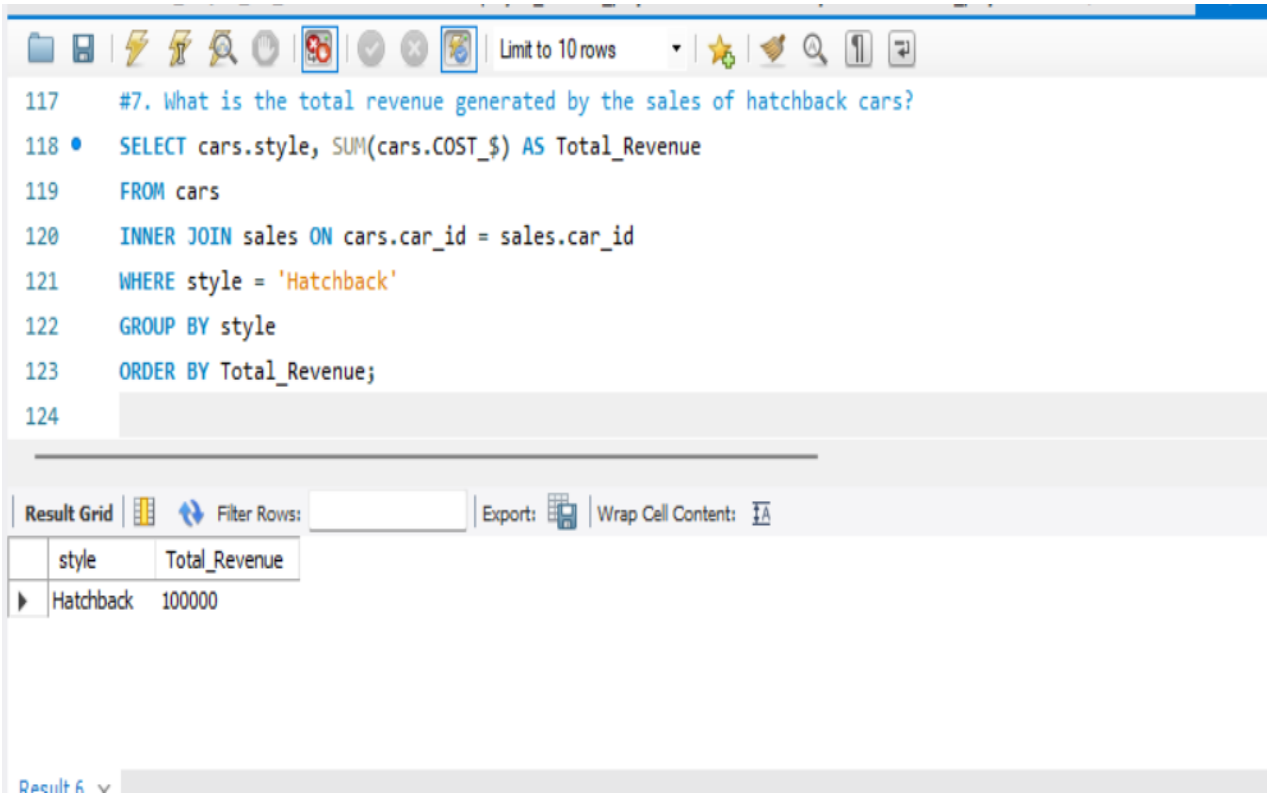
6. What are the details of the cars sold in the year 2021 by salesperson 'Emily Wong'?



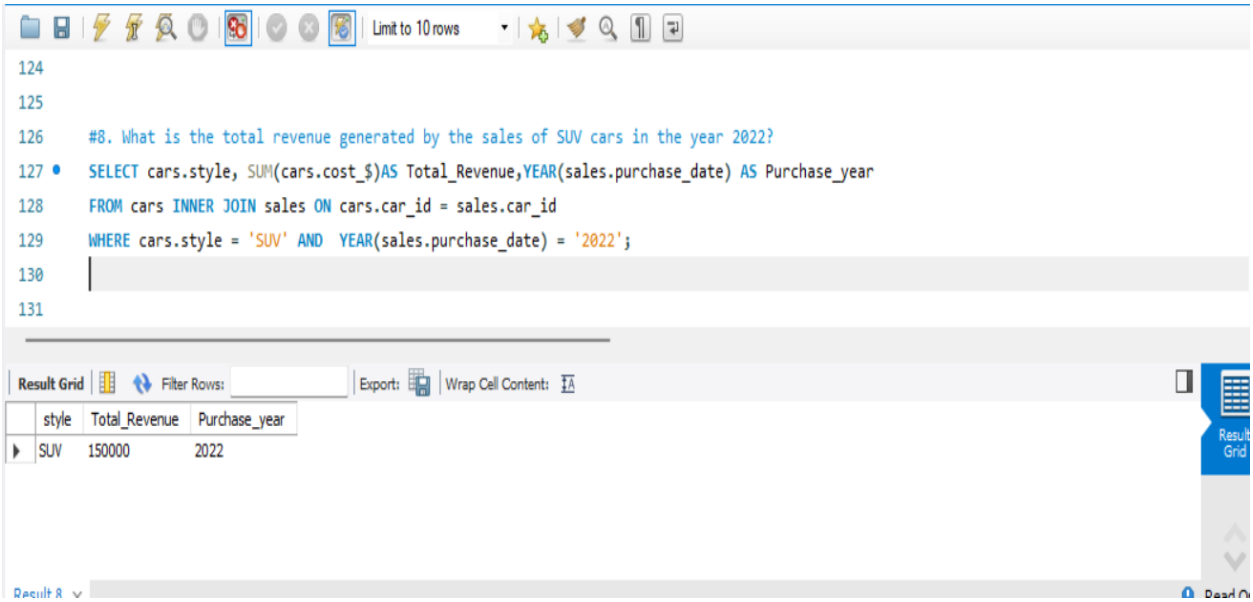
```
#6. What are the details of the cars sold in the year 2021 by salesperson 'Emily Wong'?
SELECT cars.car_id,cars.make,cars.type,cars.style,cars.cost_$,YEAR(sales.purchase_date) AS Purchase_year,salespersons.name
FROM cars INNER JOIN sales ON cars.car_id = sales.car_id
INNER JOIN salespersons ON sales.salesman_id = salespersons.salesman_id
WHERE YEAR(purchase_date) = '2021' AND salespersons.name = 'Emily Wong';
```

car_id	make	type	style	cost_$	Purchase_year	name
2	Toyota	Corolla	Hatchback	25000	2021	Emily Wong
4	Chevrolet	Camaro	Coupe	36000	2021	Emily Wong

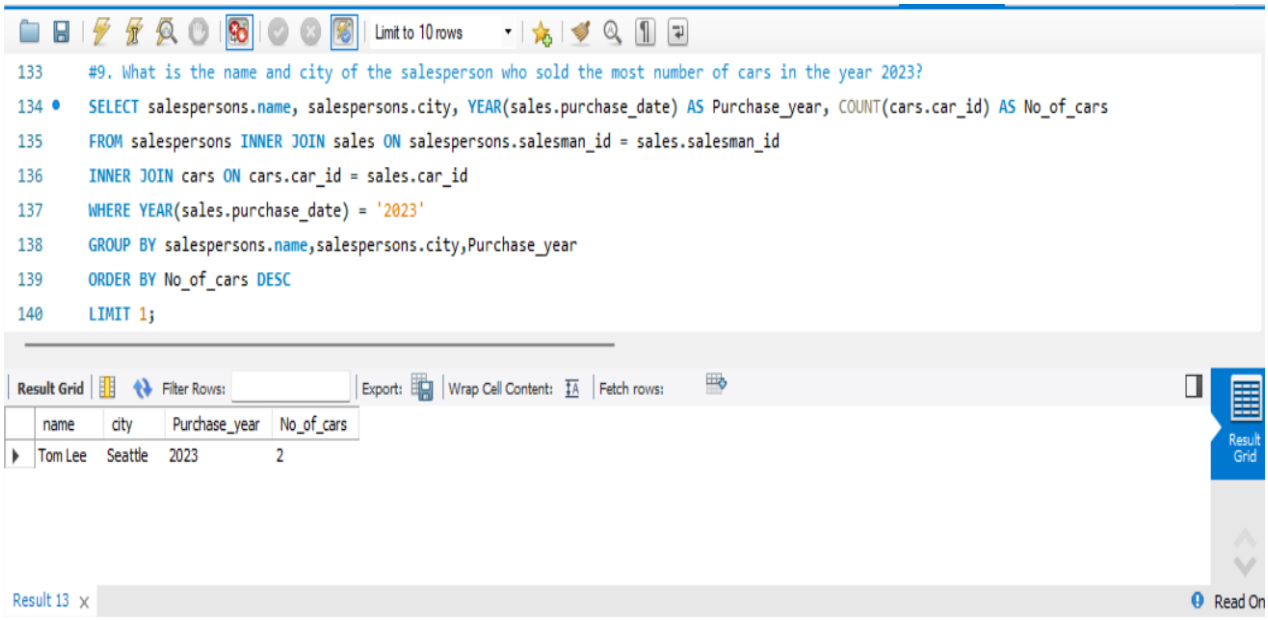
7. What is the total revenue generated by the sales of hatchback cars?



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



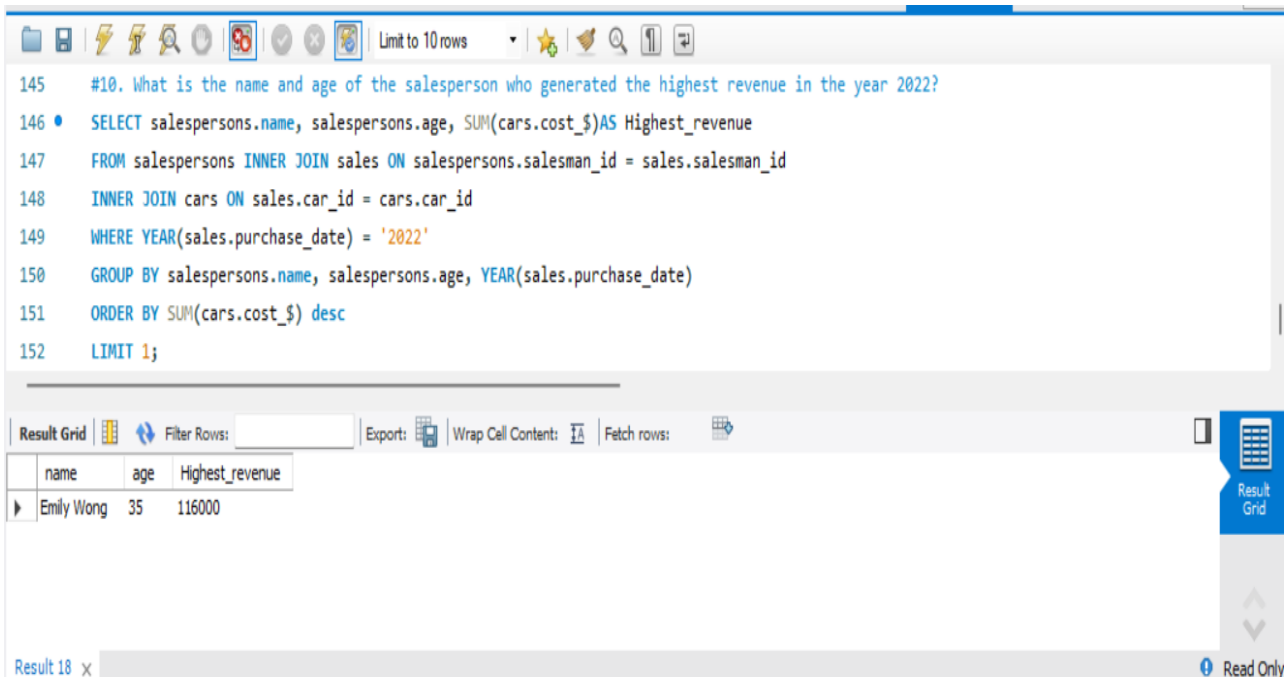
9. What is the name and city of the salesperson who sold the most number of cars in the year 2023?



```
#9. What is the name and city of the salesperson who sold the most number of cars in the year 2023?
SELECT salespersons.name, salespersons.city, YEAR(sales.purchase_date) AS Purchase_year, COUNT(cars.car_id) AS No_of_cars
FROM salespersons INNER JOIN sales ON salespersons.salesman_id = sales.salesman_id
INNER JOIN cars ON cars.car_id = sales.car_id
WHERE YEAR(sales.purchase_date) = '2023'
GROUP BY salespersons.name,salespersons.city,Purchase_year
ORDER BY No_of_cars DESC
LIMIT 1;
```

name	city	Purchase_year	No_of_cars
Tom Lee	Seattle	2023	2

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



```
#10. What is the name and age of the salesperson who generated the highest revenue in the year 2022?
SELECT salespersons.name, salespersons.age, SUM(cars.cost_$)AS Highest_revenue
FROM salespersons INNER JOIN sales ON salespersons.salesman_id = sales.salesman_id
INNER JOIN cars ON sales.car_id = cars.car_id
WHERE YEAR(sales.purchase_date) = '2022'
GROUP BY salespersons.name, salespersons.age, YEAR(sales.purchase_date)
ORDER BY SUM(cars.cost_$) desc
LIMIT 1;
```

name	age	Highest_revenue
Emily Wong	35	116000