Steve's Car Showroom

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Introduction :

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

Now it’s my responsibility to make things go smooth for business.

Schema

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?

```
      select c.car_id,c.make,c.type,c.style,c.cost_$, s.purchase_date
from cars as c
join sales as s using(car_id)
where year (purchase_date) = "2022" ;
```

OUTPUT

Result Grid | Filter Rows: | Export: | Wrap C

car_id	make	type	style	cost_$	purchase_date
1	Honda	Civic	Sedan	30000	2022-02-03
1	Honda	Civic	Sedan	30000	2022-07-09
2	Toyota	Corolla	Hatchback	25000	2022-01-01
3	Ford	Explorer	SUV	40000	2022-05-05
5	BMW	X5	SUV	55000	2022-04-02
5	BMW	X5	SUV	55000	2022-06-07
7	Mercedes	C-Class	Coupe	60000	2022-03-01
8	Nissan	Altima	Sedan	26000	2022-02-10

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

```sql
select sp.salesman_id, sp.name as salesman_name, count(s.car_id) as total_car_sold
from sales as s
join salespersons as sp using(salesman_id)
group by 1 ;
```

OUTPUT

Result Grid | Filter Rows:

salesman_id	salesman_name	total_car_sold
1	John Smith	5
2	Emily Wong	5
3	Tom Lee	6
4	Lucy Chen	4

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

```sql
select sp.salesman_id, sp.name as salesman_name, sum(cost_$) as total_revenue
from salespersons as sp
join sales as s using(salesman_id)
join cars as c using(car_id)
group by 1 ;
```

OUTPUT

Result Grid | Filter Rows:

salesman_id	salesman_name	total_revenue
1	John Smith	181000
2	Emily Wong	177000
3	Tom Lee	253000
4	Lucy Chen	171000

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

```
select s.salesman_id, sp.name as salesman_name, c.car_id,c.make,c.type,c.style,c.cost_$
from sales as s
join salespersons as sp using(salesman_id)
join cars as c using(car_id) ;
```

OUTPUT

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

salesman_id	salesman_name	car_id	make	type	style	cost_$
1	John Smith	1	Honda	Civic	Sedan	30000
1	John Smith	8	Nissan	Altima	Sedan	26000
1	John Smith	2	Toyota	Corolla	Hatchback	25000
1	John Smith	3	Ford	Explorer	SUV	40000
1	John Smith	7	Mercedes	C-Class	Coupe	60000
2	Emily Wong	2	Toyota	Corolla	Hatchback	25000
2	Emily Wong	4	Chevrolet	Camaro	Coupe	36000
2	Emily Wong	8	Nissan	Altima	Sedan	26000
2	Emily Wong	7	Mercedes	C-Class	Coupe	60000
2	Emily Wong	1	Honda	Civic	Sedan	30000
3	Tom Lee	3	Ford	Explorer	SUV	40000

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

```sql
select car_id,type,concat(sum(cost_$),' ','$') as total_revenue
from cars c
inner join sales s using(car_id)
group by 1,2 ;
```

OUTPUT

Result Grid | Filter Rows:

car_id	type	total_revenue
1	Civic	90000 $
2	Corolla	100000 $
3	Explorer	80000 $
4	Camaro	72000 $
5	X5	220000 $
6	A4	48000 $
7	C-Class	120000 $
8	Altima	52000 $

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

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

OUTPUT

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

salesman_id	name	car_id	make	type	style	cost_$	purchase_date
2	Emily Wong	2	Toyota	Corolla	Hatchback	25000	2021-02-10
2	Emily Wong	4	Chevrolet	Camaro	Coupe	36000	2021-06-07

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

```sql
select c.style, sum(c.cost_$) as total_revenue
from sales as s
inner join cars as c using (car_id)
where c.style = 'hatchback'
group by 1 ;
```

OUTPUT

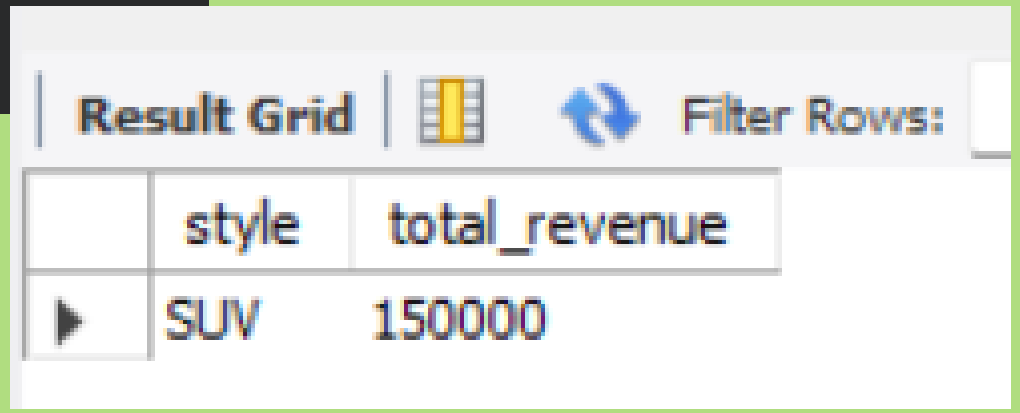
Result Grid | Filter Rows:

	style	total_revenue
▶	Hatchback	100000

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

```sql
select c.style, sum(c.cost_$) as total_revenue
from sales as s
inner join cars as c using (car_id)
where c.style = 'SUV' and
year(s.purchase_date) = "2022"
group by style ;
```

OUTPUT

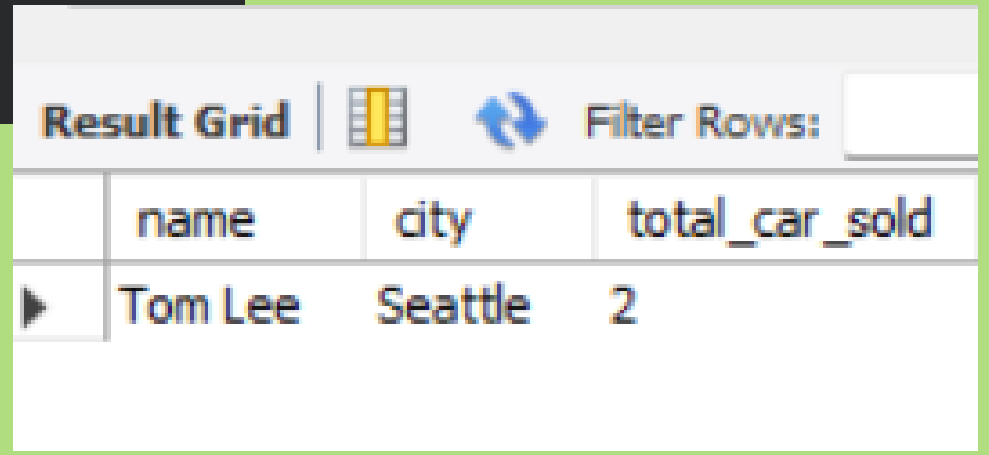


	style	total_revenue
▶	SUV	150000

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

```sql
select sp.name, sp.city , count(s.car_id) as total_car_sold
from salespersons as sp
inner join sales as s using(salesman_id)
join cars as c using (car_id)
where year(purchase_date) = "2023"
group by 1,2
order by total_car_sold desc
limit 1;
```

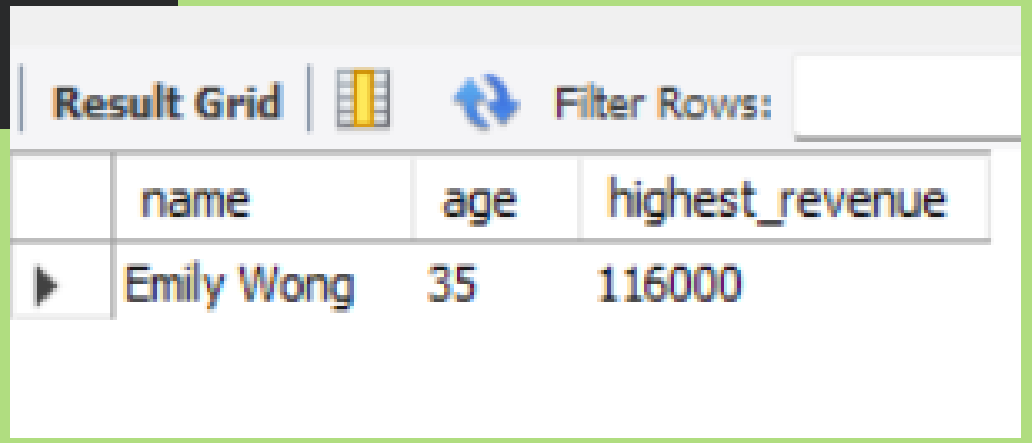
OUTPUT



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

```sql
select sp.name,sp.age, sum(c.cost_$) as highest_revenue
from sales as s
inner join cars as c using (car_id)
join salespersons as sp using(salesman_id)
where year(s.purchase_date) = "2022"
group by 1,2
order by highest_revenue desc
limit 1;
```

OUTPUT



Thank You