

CHALLENGE 1

Steve's Car Showroom Analysis





Tables

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

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

=

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

```
select cars.car_id,make,type,style,cost_$,sales.purchase_date from cars  
inner join sales on cars.car_id = sales.car_id  
where purchase_date>='2022-01-01' and purchase_date<='2022-12-01';
```

output



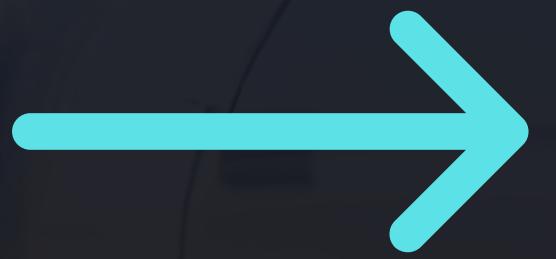
car_id	make	type	style	cost_\$	purchase_date
1	Honda	Civic	Sedan	30000	2022-02-03
1	Honda	Civic	Sedan	30000	2022-07-09
2	Toyota	Corolla	Hatchback	25000	2022-01-01
3	Ford	Explorer	SUV	40000	2022-05-05
5	BMW	X5	SUV	55000	2022-04-02
5	BMW	X5	SUV	55000	2022-06-07
7	Mercedes	C-Class	Coupe	60000	2022-03-01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

Your paragraph text

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

```
select salespersons.name, count(sale_id) as "count" from salespersons  
inner join sales on salespersons.salesman_id = sales.salesman_id  
group by salespersons.name;
```

output

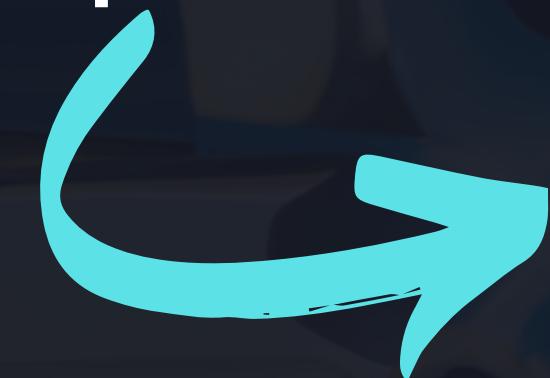


name	count
Emily Wong	5
John Smith	5
Lucy Chen	4
Tom Lee	6

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

```
select salespersons.name, sum(cost$_) as "revenue" from salespersons  
inner join sales on salespersons.salesman_id = sales.salesman_id  
inner join cars on cars.car_id = sales.car_id  
group by salespersons.name;
```

output

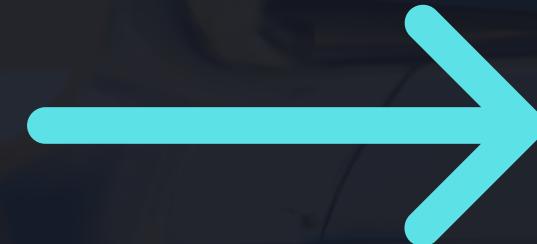


name	revenue
Emily Wong	177000
John Smith	181000
Lucy Chen	171000
Tom Lee	253000

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

```
select salespersons.name, cars.car_id, cars.make, cars.type, cars.style, cars.cost_$ from cars  
inner join sales on cars.car_id = sales.car_id  
inner join salespersons on salespersons.salesman_id = sales.salesman_id  
order by salespersons.name;
```

output

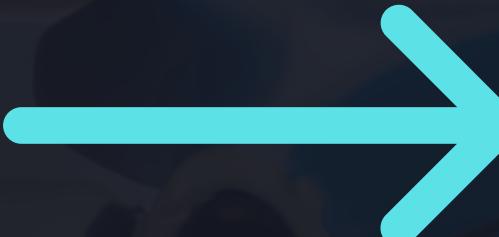


name	car_id	make	type	style	cost_\$
Emily Wong	2	Toyota	Corolla	Hatchback	25000
Emily Wong	4	Chevrolet	Camaro	Coupe	36000
Emily Wong	8	Nissan	Altima	Sedan	26000
Emily Wong	7	Mercedes	C-Class	Coupe	60000
Emily Wong	1	Honda	Civic	Sedan	30000
John Smith	1	Honda	Civic	Sedan	30000
John Smith	8	Nissan	Altima	Sedan	26000
John Smith	2	Toyota	Corolla	Hatchback	25000
John Smith	3	Ford	Explorer	SUV	40000
John Smith	7	Mercedes	C-Class	Coupe	60000
Lucy Chen	5	BMW	X5	SUV	55000
Lucy Chen	2	Toyota	Corolla	Hatchback	25000
Lucy Chen	5	BMW	X5	SUV	55000
Lucy Chen	4	Chevrolet	Camaro	Coupe	36000
Tom Lee	3	Ford	Explorer	SUV	40000
Tom Lee	5	BMW	X5	SUV	55000

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

```
select cars.type, sum(cost$_) as "Revenue" from cars  
inner join sales on sales.car_id = cars.car_id  
group by cars.type;
```

output



type	Revenue
A4	48000
Altima	52000
C-Class	120000
Camaro	72000
Civic	90000
Corolla	100000
Explorer	80000
X5	220000

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

```
select salespersons.name, cars.car_id, cars.make, cars.type, cars.style, cars.cost_$, sales.purchase_date from cars
inner join sales on cars.car_id = sales.car_id
inner join salespersons on salespersons.salesman_id = sales.salesman_id
where salespersons.name = 'Emily Wong' and sales.purchase_date >= '2021-01-01' and sales.purchase_date <='2021-12-01';
```

output



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

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

```
select cars.style, sum(cost_) as "Revenue" from cars  
inner join sales on sales.car_id = cars.car_id  
where cars.style = "hatchback"  
group by cars.style;
```

output



style	Revenue
Hatchback	100000

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

```
select cars.style,sum(cost_) as "Revenue" from cars  
inner join sales on sales.car_id = cars.car_id  
where cars.style ='SUV' and sales.purchase_date >= '2022-01-01' and sales.purchase_date <='2022-12-01'  
group by cars.style;
```

output



	style	Revenue
	SUV	150000

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, count(sales.sale_id) as "count" from salespersons
inner join sales on salespersons.salesman_id = sales.salesman_id
where sales.purchase_date >= '2023-01-01' and sales.purchase_date <='2023-12-01'
group by salespersons.name
order by count desc limit 1;
```

output



	name	city	count
	Tom Lee	Seattle	2

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 "revenue" from salespersons
inner join sales on salespersons.salesman_id = sales.salesman_id
inner join cars on cars.car_id = sales.car_id
where sales.purchase_date >= '2022-01-01' and sales.purchase_date <='2022-12-01'
group by salespersons.name
order by revenue desc limit 1;
```

output



	name	age	revenue
	Emily Wong	35	116000



Thank You



