

STEVE'S CAR SHOWROOM

PRESENTED BY RACHANA GARAD



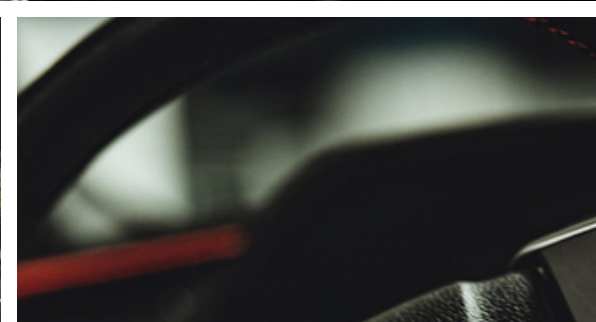
<https://www.steeldata.org.uk/sql1.html>

INTRODUCTION

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	2022-02-10
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

DATA ANALYSIS

Q1. WHAT ARE THE DETAILS OF ALL CARS PURCHASED IN THE YEAR 2022?

```
select s.car_id, count(s.car_id) as total_number_of_cars,  
       make, type, style, cost_$, sum(cost_$) as total_$  
from sales as s  
join cars as c  
on c.car_id = s.car_id  
where year(purchase_date) = '2022'  
group by s.car_id;
```

	car_id	total_number_of_cars	make	type	style	cost_\$	total_\$
▶	1	2	Honda	Civic	Sedan	30000	60000
	2	1	Toyota	Corolla	Hatchback	25000	25000
	3	1	Ford	Explorer	SUV	40000	40000
	5	2	BMW	X5	SUV	55000	110000
	7	1	Mercedes	C-Class	Coupe	60000	60000
	8	1	Nissan	Altima	Sedan	26000	26000

Q2. WHAT IS THE TOTAL NUMBER OF CARS SOLD BY EACH SALESPERSON?

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

salesman_id	name	number_of_cars_sold
1	John Smith	5
2	Emily Wong	5
3	Tom Lee	6
4	Lucy Chen	4

Q3. WHAT IS THE TOTAL REVENUE GENERATED BY EACH SALESPERSON?

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

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

Q4. WHAT ARE THE DETAILS OF THE CARS SOLD BY EACH SALESPERSON?

```
select s.salesman_id, name, s.car_id, count(s.car_id) as number_of_cars,  
       make, type, style, sum(cost_$) as price  
from sales as s  
join cars as c using (car_id)  
join salespersons using (salesman_id )  
group by s.salesman_id, s.car_id;
```

salesman_id	name	car_id	number_of_cars	make	type	style	price
1	John Smith	1	1	Honda	Civic	Sedan	30000
1	John Smith	8	1	Nissan	Altima	Sedan	26000
1	John Smith	2	1	Toyota	Corolla	Hatchback	25000
1	John Smith	3	1	Ford	Explorer	SUV	40000
1	John Smith	7	1	Mercedes	C-Class	Coupe	60000
2	Emily Wong	2	1	Toyota	Corolla	Hatchback	25000
2	Emily Wong	4	1	Chevrolet	Camaro	Coupe	36000
2	Emily Wong	8	1	Nissan	Altima	Sedan	26000
2	Emily Wong	7	1	Mercedes	C-Class	Coupe	60000
2	Emily Wong	1	1	Honda	Civic	Sedan	30000
3	Tom Lee	3	1	Ford	Explorer	SUV	40000
3	Tom Lee	5	2	BMW	X5	SUV	110000
3	Tom Lee	1	1	Honda	Civic	Sedan	30000
3	Tom Lee	2	1	Toyota	Corolla	Hatchback	25000
3	Tom Lee	6	1	Audi	A4	Sedan	48000
4	Lucy Chen	5	2	BMW	X5	SUV	110000
4	Lucy Chen	2	1	Toyota	Corolla	Hatchback	25000

Q5. WHAT IS THE TOTAL REVENUE GENERATED BY EACH CAR TYPE?

```
select s.car_id, type, sum(cost_$) as revenue
from sales s
join cars as c using (car_id)
group by s.car_id
order by s.car_id ;
```

car_id	type	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

Q6. WHAT ARE THE DETAILS OF THE CARS SOLD IN THE YEAR 2021 BY SALESPERSON 'EMILY WONG'?

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

	salesman_id	name	car_id	make	type	style	cost_\$
▶	2	Emily Wong	2	Toyota	Corolla	Hatchback	25000
	2	Emily Wong	4	Chevrolet	Camaro	Coupe	36000

Q7. WHAT IS THE TOTAL REVENUE GENERATED BY THE SALES OF HATCHBACK CARS?

```
select style, sum(cost_$) as revenue
from sales as s
join cars as c using (car_id )
where style = 'Hatchback'
group by style;
```

	style	revenue
▶	Hatchback	100000

Q8. WHAT IS THE TOTAL REVENUE GENERATED BY THE SALES OF SUV CARS IN THE YEAR 2022?

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

	style	revenue
▶	SUV	1500000

Q9. WHAT IS THE NAME AND CITY OF THE SALESPERSON WHO SOLD THE MOST NUMBER OF CARS IN THE YEAR 2023?

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

salesman_id	name	city	number_of_cars
3	Tom Lee	Seattle	2
1	John Smith	New York	1
4	Lucy Chen	LA	1

Q10. WHAT IS THE NAME AND AGE OF THE SALESPERSON WHO GENERATED THE HIGHEST REVENUE IN THE YEAR 2022?

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

salesman_id	name	age	revenue
2	Emily Wong	35	116000



INSIGHTS

- In 2022 the most purchased cars were from Honda(2) and BMW(2) and BMW made highest revenue(\$110000) during the year.
- Tom Lee sold the most number of cars(6) and also generated the highest revenue(\$253000).
- The highest total revenue was generated by car type X5 (\$220000) followed by C-Class (\$120000).
- Emily Wong sold a Toyota (\$25000) and a Chevrolet (\$36000) in 2021.
- Hatchback-style cars generated \$100000 in revenue.
- SUV-style cars generated \$150000 in revenue in 2022.
- In 2023 most number of cars were sold by Tom Lee(2) in Seattle.
- In 2022 the highest revenue of \$116000 was generated by Emily Wong (age 35).



THANK YOU

