

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

```
SELECT *, YEAR(sales.purchase_date) AS purchase_year
FROM cars INNER JOIN sales USING (car_id)
WHERE YEAR(sales.purchase_date) = 2022
ORDER BY car_id;
```

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

```
SELECT sales.salesman_id, salespersons.name, COUNT(sales.car_id) AS total_car_sold
FROM sales INNER JOIN salespersons USING(salesman_id)
GROUP BY sales.salesman_id, salespersons.name
ORDER BY sales.salesman_id;
```

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

```
SELECT sales.salesman_id, salespersons.name, SUM(cars.cost_$) AS total_revenue
FROM sales INNER JOIN salespersons USING(salesman_id)
INNER JOIN cars USING(car_id)
GROUP BY sales.salesman_id, salespersons.name
ORDER BY sales.salesman_id;
```

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

```
SELECT sales.salesman_id, salespersons.name, cars.car_id, cars.make, cars.type, cars.style, cars.cost_$
FROM sales INNER JOIN salespersons USING(salesman_id)
INNER JOIN cars USING (car_id )
GROUP BY sales.salesman_id, salespersons.name, cars.car_id
ORDER BY sales.salesman_id, cars .car_id;
```

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

- use practice;
- ```
SELECT sales.car_id, cars.type, SUM(cars.cost_$ ) AS total_revenue
FROM sales INNER JOIN cars USING (car_id )
GROUP BY sales.car_id,cars.type
ORDER BY sales.car_id ;
```

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

- ```
SELECT sales.car_id, sales.salesman_id, salespersons.name, YEAR(sales.purchase_date) AS selling
cars.make, cars.type, cars.style, cars.cost_$
FROM sales INNER JOIN salespersons USING(salesman_id)
INNER JOIN cars USING(car_id)
WHERE salespersons.name = "Emily Wong"
AND YEAR(sales.purchase_date) = 2021
ORDER BY sales.car_id;
```

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

- ```
SELECT sales.car_id, cars.style,SUM(cars.cost_$) AS total_revenue
FROM sales INNER JOIN cars USING(car_id )
WHERE cars.style = "Hatchback"
GROUP BY sales. car_id;
```

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

```
SELECT SUM(cars.cost_$) AS total_revenue, cars.style
FROM sales JOIN cars USING(car_id)
WHERE style = 'SUV' AND YEAR(purchase_date) = 2022
group by cars.style;
```

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

```
select sales.salesman_id, salespersons.name, salespersons.city, COUNT(sales.car_id) as total_car_sold_in_2023
FROM sales INNER JOIN salespersons USING(salesman_id)
WHERE YEAR(sales.purchase_date) = 2023
GROUP BY sales.salesman_id, salespersons.name
ORDER BY COUNT(sales.car_id) DESC
LIMIT 1;
```

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

```
SELECT sales.salesman_id, salespersons.name, salespersons.age, SUM(cars.cost_$) AS total_revenue_in_2022
FROM sales INNER JOIN salespersons USING(salesman_id)
INNER JOIN cars USING(car_id)
WHERE YEAR(sales.purchase_date) = 2022
GROUP BY sales.salesman_id, salespersons.name
ORDER BY SUM(cars.cost_$) DESC
LIMIT 1;
```