Joins

dealer_id	dealer_name	location
1	EliteMotors	Mumbai
2	speedWheels	Delhi
3	AutoHub	Bangalore
4	Citycars	Chennai
5	LuxuryDrive	Hyderabad
NULL	NULL	NULL

sale_id	car_model	dealer_id	sale_amount	sale_date
101	BMWX1	1	4200000	2025-06-12
102	BMWx5	2	8500000	2025-06-18
103	BMW3series	1	5200000	2025-07-02
104	BMWx3	4	6400000	2025-07-10
105	BMW7series	2	12000000	2025-08-01
106	BMWx6	3	9800000	2025-08-12
NULL	NULL	NULL	NULL	NULL

LEFT JOIN Practice Questions (15 Total) :--
1. Display all dealers and the cars they sold
   select dealers.dealer_name,dealers.dealer_id,dealers.location,sales.car_model from dealers
    left join sales
    on dealers.dealer_id=sales.dealer_id;

dealer_name	dealer_id	location	car_model
EliteMotors	1	Mumbai	BMWX1
EliteMotors	1	Mumbai	BMW3series
speedWheels	2	Delhi	BMWx5
speedWheels	2	Delhi	BMW7series
AutoHub	3	Bangalore	BMWx6
Citycars	4	Chennai	BMWx3
LuxuryDrive	5	Hyderabad	NULL

2.Show all dealers, even if they didn't sell any cars (replace NULL with 'No Sale').

```
 SELECT dealers.dealer_name,
COALESCE(sales.car_model, 'No Sale') AS car_model
FROM dealers
LEFT JOIN sales
ON dealers.dealer_id = sales.dealer_id;
```

dealer_name	car_model
EliteMotors	BMWX1
EliteMotors	BMW3series
speedWheels	BMWx5
speedWheels	BMW7series
AutoHub	BMWx6
Citycars	BMWx3
LuxuryDrive	No Sale

3. Display car models along with their dealer names and locations.

```
  select sales.car_model,dealers.dealer_name
from dealers
left join sales
on dealers.dealer_id = sales.dealer_id;
```

car_model	dealer_name
BMWX1	EliteMotors
BMW3series	EliteMotors
BMWx5	speedWheels
BMW7series	speedWheels
BMWx6	AutoHub
BMWx3	Citycars
NULL	LuxuryDrive

4.Find all dealers who haven't made any sales yet.

```
        select dealers.dealer_name
          from dealers
          left join sales
           on dealers.dealer_id=sales.dealer_id
         where sales.sale_id is null;
```

dealer_name
LuxuryDrive

5.List each dealer's name and total sales amount.

```
select dealers.dealer_name,sum(sales.sale_amount) as total_amount
```

from dealers
left join sales
on dealers.dealer_id =sales.dealer_id
group by dealers.dealer_name;

	dealer_name	total_amount
▶	EliteMotors	9400000
	speedWheels	20500000
	AutoHub	9800000
	Citycars	6400000
	LuxuryDrive	NULL

5. Display all cars sold by 'Speed Wheels'.
select sales.car_model,sales.sale_amount,sales.sale_date
from sales
join dealers
on dealers.dealer_id=sales.dealer_id
where dealers.dealer_name="SpeedWheels";

	car_model	sale_amount	sale_date
▶	BMWx5	8500000	2025-06-18
	BMW7series	12000000	2025-08-01

6.Show dealer names with car models and sale dates (sorted by sale_date).

	dealer_name	car_model	sale_date
▶	EliteMotors	BMWX1	2025-06-12
	speedWheels	BMWx5	2025-06-18
	EliteMotors	BMW3series	2025-07-02
	Citycars	BMWx3	2025-07-10
	speedWheels	BMW7series	2025-08-01
	AutoHub	BMWx6	2025-08-12

select dealers.dealer_name,sales.car_model,sales.sale_date
from dealers
join sales
on dealers.dealer_id=sales.dealer_id
order by sales.sale_date asc;
7.Find dealers and their average sale amount.
select dealers.dealer_name,avg(sales.sale_amount) as avg_salary
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
group by dealers.dealer_name;

dealer_name	avg_sale
EliteMotors	4700000.0000
speedWheels	10250000.0000
AutoHub	9800000.0000
Citycars	6400000.0000
LuxuryDrive	NULL

8. Show dealer names with the count of cars sold.

select dealers.dealer_name,count(sales.sale_id) as cars_sold
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
group by dealers.dealer_name;

dealer_name	cars_sold
EliteMotors	2
speedWheels	2
AutoHub	1
Citycars	1
LuxuryDrive	0

9.Display dealer name, car model, and sale amount for sales above ₹8,000,000.
 select dealers.dealer_name,sales.car_model,sales.sale_amount
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
where sales.sale amount > 8000000;

dealer_name	car_model	sale_amount
speedWheels	BMWx5	8500000
speedWheels	BMW7series	12000000
AutoHub	BMWx6	9800000

10.List all car models and replace dealer name with 'Not Assigned' if NULL.

select sales.car_model,
coalesce(dealers.dealer_id,'Not Assigned') as dealer
from sales
left join dealers
on dealers.dealer_id=sales.dealer_id;

car_model	dealer
BMWX1	1
BMWx5	2
BMW3series	1
BMWx3	4
BMW7series	2
BMWx6	3

11.Show dealer names and cars sold in July 2025.
  select dealers.dealer_name,sales.car_model
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
where month(sales.sale_date)=7 and year(sales.sale_date)=2025;

dealer_name	car_model
EliteMotors	BMW3series
Citycars	BMWx3

12. Find dealers who sold more than one car.

select dealers.dealer_name,count(sales.sale_id) as total_sales
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
group by dealers.dealer_name
having count(sales.sale_id)>1;

dealer_name	total_sales
EliteMotors	2
speedWheels	2

13.Display all dealers with their total and average sales using LEFT JOIN and GROUP BY.

select dealers.dealer_name,
sum(sales.sale_amount) as total,
avg(sales.sale_amount) as averagesale
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
group by dealers.dealer_name;

dealer_name	total	averagesale
EliteMotors	9400000	4700000.0000
speedWheels	20500000	10250000.0000
AutoHub	9800000	9800000.0000
Citycars	6400000	6400000.0000
LuxuryDrive	NULL	NULL

14. Show all dealers along with their latest sale date (or 'No Sales Yet' if none).

select dealers.dealer_name,
coalesce(max(sales.sale_date),'No sales Yet') as latest_sale
from dealers
left join sales
on dealers.dealer_id=sales.dealer_id
group by dealers.dealer_name;

dealer_name	latest_sale
EliteMotors	2025-07-02
speedWheels	2025-08-01
AutoHub	2025-08-12
Citycars	2025-07-10
LuxuryDrive	No sales Yet