Query 2: Derive desired output

Using the Source and Target table, write a query to arrive at the Output table as shown in below image. Provide the solution without using subqueries.

Input table:

Source			Target	
Id	Name		Id	Name
1	A		1	A
2	B		2	B
3	C		4	X
4	D		5	F

Expected Output:

Output	
Id	Comment
3	New in source
5	New in target
4	Mismatch

Solution:

SELECT s.*, 'Mismatch' as Comment
FROM source s
JOIN target t on s.id=t.id and s.name<>t.name
     UNION
SELECT S.id,'New in source' as comments
FROM SOURCE S
left join target t on s.id=t.id
where t.id is null
     UNION
SELECT t.id,'New in target' as comments
FROM SOURCE S
right join target t on s.id=t.id
where s.id is null

Explanation:
First select statement joins the two tables with inner join and matches all the matching values from both the tables based on the ID. Since the name of the ID 4 is different in both the tables we have the corresponding comment as mismatch

The second Select statement joins the two tables using left join and matches only the matching value with the right table along with all the values in left table. Since ID 3 is not present in the right table we have the corresponding comment as 'New in source'

The third Select statement joins the two tables using right join and matches only the matching value with the left table along with all the values in right table. Since ID 5 is not present in the left table we have the corresponding comment as 'New in target'

Then we use UNION operator to append all the three queries to print the desired output.