

# Interview Questions on Joins

1. What is a JOIN in SQL, and why is it used?
2. Explain the difference between INNER JOIN and OUTER JOIN.
3. What is the default join in SQL if not specified?
4. How does a LEFT JOIN handle unmatched rows?
5. What happens to unmatched rows in a FULL JOIN?
6. How is a CROSS JOIN different from other joins?
7. Explain a SELF JOIN with a real-world use case.
8. How does NATURAL JOIN determine matching columns?
9. Can you join more than two tables in SQL? How?
10. Write a query to find employees without a department.
11. Write a query to list all departments even if no employee is assigned.
12. Explain the difference between LEFT JOIN and RIGHT JOIN.
13. What are the performance considerations of JOINS in large datasets?
14. How can indexes improve the performance of JOIN queries?
15. How do you simulate a FULL OUTER JOIN in MySQL?
16. What is an equi-join?
17. What is a non-equi-join? Provide an example.
18. How does SQL handle NULL values in JOIN conditions?
19. Write a query using a LEFT JOIN and WHERE clause together.
20. Can you perform a JOIN on more than one condition?
21. Explain the difference between USING and ON in JOIN.
22. What is the difference between INNER JOIN and NATURAL JOIN?
23. Write a query to find employees working on more than one project.
24. Write a query to get employee names and their respective project names.
25. What are Cartesian products? How can you avoid them?
26. What is the difference between a JOIN and a UNION?
27. Write a query to get employees without projects assigned.
28. Can you use an alias with JOIN? How?
29. How do aggregate functions work with JOINS?
30. Explain the term “key preservation” in the context of JOINS.