

60+ Most Asked

Interview Questions

on **SQL**



- Q1. What is SQL and its significance in databases?
- Q2. Differentiate between SQL and MySQL.
- Q3. Explain the basic structure of an SQL query.
- Q4. What is normalization, and what are its types?
- Q5. What is denormalization?
- Q6. What is a primary key? How is it different from a foreign key?
- Q7. What is an index, and why is it used in databases?
- Q8. Describe the difference between INNER JOIN and LEFT JOIN.
- Q9. How do you add a new record to a table?
- Q10. What are the subsets of SQL?
- Q11. Explain database white box testing and black box testing.
- Q12. How can you create empty tables with the same structure as another table?
- Q13. What is the difference between the DROP and TRUNCATE commands?



- Q14. What are the benefits of SQL database over NoSQL database?
- Q15. What is a primary key?
- Q16. What is meant by table and field in SQL?
- Q17. What is a constraint, and why use constraints?
- Q18. What is a subquery?
- Q19. What is a SQL operator?
- Q20. What is an alias?
- Q21. What is the purpose of the GROUP BY clause in SQL?
- Q22. Explain the concept of a subquery and provide an example.
- Q23. How can you prevent SQL injection in your queries?
- Q24. What are stored procedures, and how are they different from functions?
- Q25. Describe the ACID properties in the context of database transactions.
- Q26. Explain the use of the HAVING clause in SQL.



Q27. Differentiate between UNION and UNION ALL.

Q28. What is the purpose of the COALESCE function?

Q29. How do you perform a self-join in SQL?

Q30. Explain the concept of database transactions.

Q31. What is the purpose of the window functions in SQL?

Q32. Explain the differences between clustered and non-clustered indexes.

Q33. How does the SQL Server optimizer work?

Q34. What are common table expressions (CTEs), and when would you use them?

Q35. Discuss the concept of materialized views in databases.

Q36. How can you optimize a query's performance in SQL?

Q37. Explain the purpose of the OLAP and OLTP database systems.

Q38. What is the difference between a view and a table?



- Q39. Describe the process of database sharding.
- Q40. Explain the use of the APPLY operator in SQL.
- Q41. How to update a table?
- Q42. How do you sort records in a table?
- Q43. What is the DISTINCT statement, and how do you use it?
- Q44. What are entities? Give some examples.
- Q45. What scalar functions do you know?
- Q46. How do we prevent duplicate records when making a query?
- Q47. How do you add a record to a table?
- Q48. What are SQL operators?
- Q49. What do you mean by data integrity?
- Q50. Why is the FLOOR function used in SQL Server?
- Q51. Write a query to extract the username(characters before @ symbol) from the Email_ID column.



Q52. Write a query to extract domain name like .com, .in, .au etc. from the Email_ID column.

Q53. Write a query to extract email service provider names like google, yahoo, outlook, etc. from the Email_ID column.

Q54. What is(are) the output of the following query?

Q55. Write a query to extract all the consonants present in your name.

Q56. Write a query to extract all the vowels present in your name.

Q57. Write a query to extract the employees' details who joined in the year 1981.

Q58. Write a query to find the hiked salary for each employee after adding the commission.

Q59. Write a query to find out the employees drawing a higher salary than their managers.

Q60. Write a query to find out the subordinates (reportees) who joined the organization before their managers.



Q61. Write a query to find out the employees who don't have any subordinates (reportees) i.e. the employees who are not the managers.

Q62. Write a query to find out 2nd senior-most employee i.e. who joined the organization second as per hire date.

Q63. Write a query to find out the 5th maximum salary.

Q64. Write a query to find out the deviation from average salary for the employees who are getting more than the average salary.

Q65. Write a query to find out the employees who are getting the maximum salary in their departments.

Q66. Write a query to find out department-wise minimum salary, maximum salary, total salary, and average salary.