

66 MS SQL Interview Questions to Hire Top DBAs

Questions

1. Can you explain what a primary key is and why it's important in a database?
2. What is a foreign key, and how does it relate to a primary key?
3. Can you describe what a JOIN operation does in SQL?
4. What is normalization, and why is it important in database design?
5. What is an index in SQL, and how does it improve database performance?
6. Can you explain the difference between DELETE and TRUNCATE commands in SQL?
7. What are SQL constraints, and why are they important?
8. What is a stored procedure, and when would you use one?
9. What is the purpose of the GROUP BY clause in SQL?
10. Can you explain what a view is in SQL and why you might use one?
11. How would you optimize a slow-running query in MS SQL Server?
12. Explain the difference between a clustered and non-clustered index.
13. What is the purpose of the HAVING clause in SQL?
14. How do you handle deadlocks in MS SQL Server?
15. What is the difference between UNION and UNION ALL?
16. Explain the concept of transaction isolation levels in MS SQL Server.
17. How would you implement error handling in a stored procedure?
18. What is the purpose of the MERGE statement in SQL?
19. How do you create and use temporary tables in MS SQL Server?
20. Explain the difference between a local and global temporary table.
21. What is a CTE (Common Table Expression) and when would you use it?
22. How do you perform database backups and restores in MS SQL Server?
23. What is the purpose of the NOLOCK hint in SQL queries?
24. Explain the concept of database mirroring in MS SQL Server.
25. How do you monitor and troubleshoot performance issues in MS SQL Server?
26. What is the difference between a scalar function and a table-valued function?
27. How do you implement data encryption in MS SQL Server?
28. Explain the concept of database snapshots and their uses.
29. What are the different types of triggers in MS SQL Server?
30. How do you implement row-level security in MS SQL Server?
31. How would you approach designing a database schema for a large-scale e-commerce platform?
32. Explain the concept of query plan caching in SQL Server and how it impacts performance.
33. How would you implement a soft delete mechanism in a database, and what are the pros and cons of this approach?
34. Describe a situation where you would use table partitioning, and explain how you would implement it.
35. How would you approach optimizing a complex stored procedure that's causing performance issues?
36. Explain the concept of ACID properties in database transactions and how SQL Server ensures them.
37. How would you design a high-availability solution for a mission-critical SQL Server database?
38. Describe a challenging database performance issue you've encountered and how you resolved it.
39. How would you approach troubleshooting a query that suddenly started running much slower than usual?
40. Can you explain the process of setting up and maintaining a SQL Server Agent job?
41. What steps do you take to ensure data integrity during a bulk data import?
42. Describe how you would handle the migration of a database from one server to another.
43. How do you monitor and manage database growth and storage requirements in MS SQL Server?
44. What are some common causes of blocking issues in SQL Server, and how do you resolve them?
45. Can you explain the process of implementing and managing SQL Server replication for high availability?
46. How would you approach configuring and managing security permissions for a large database?
47. Describe the steps you would take to troubleshoot a failed database backup.
48. How do you ensure that your database maintenance plans are effective and running as expected?
49. What methods do you use to manage and archive old or unused data in SQL Server?
50. How do you handle and resolve orphaned users in a SQL Server database?
51. How do you handle a situation where a query is taking too long to execute?
52. Can you explain what a deadlock is and how you would resolve it?
53. What is the role of a SQL Server Agent, and how would you use it?
54. How do you manage database security, and what are the best practices you follow?
55. What steps do you take to ensure data integrity during a bulk data import?
56. How do you monitor and troubleshoot performance issues in MS SQL Server?
57. What is the purpose of using database snapshots, and how do you create one?
58. Can you describe a time when you had to troubleshoot a significant performance issue in a SQL Server database? What steps did you take?
59. How would you handle a situation where a critical database process fails during peak business hours?
60. Describe a time when you had to migrate a database to a new server. What challenges did you face and how did you overcome them?
61. How would you manage and optimize the storage requirements of a growing database?
62. What steps would you take to ensure data integrity during a bulk data import operation?
63. Can you describe a time when you had to resolve a blocking issue in SQL Server? What approach did you take?
64. How do you approach designing a backup and recovery strategy for a mission-critical database?
65. What methods do you use to monitor database performance and ensure it meets SLAs?