

68 SQL Server Interview Questions to Ask and Answers to Evaluate Applicants

Questions

1. Can you explain the difference between clustered and non-clustered indexes in SQL Server?
2. How do you handle performance tuning in SQL Server?
3. What are the different types of backup available in SQL Server, and when would you use each type?
4. Describe the process of optimizing a slow-running query in SQL Server.
5. What is SQL Server Profiler, and how would you use it to troubleshoot database issues?
6. How do you implement security measures in SQL Server to protect sensitive data?
7. What are the steps to migrate a SQL Server database to a newer version?
8. Can you explain the concept of database normalization and why it's important?
9. How would you design a high-availability solution for a critical SQL Server database?
10. What are SQL Server Agent jobs, and how do you use them in database maintenance tasks?
11. Can you explain the importance of transaction logs in SQL Server?
12. How do you approach troubleshooting connectivity issues in SQL Server?
13. What steps would you take to monitor and improve database performance?
14. Can you describe the process of setting up database mirroring in SQL Server?
15. How would you manage user permissions and roles in SQL Server?
16. What is your approach to handling deadlocks in SQL Server?
17. How do you ensure data integrity in SQL Server?
18. Can you explain the role of SQL Server Agent and how you use it?
19. Can you explain the difference between a primary key and a unique key in SQL Server?
20. How do you handle database replication in SQL Server, and what are the different types available?
21. Describe how you would implement indexing strategies in SQL Server to improve query performance.
22. What are common causes of SQL Server deadlocks, and how would you resolve them?
23. Can you explain the use of SQL Server Integration Services (SSIS) for ETL processes?
24. How would you go about setting up and managing AlwaysOn Availability Groups in SQL Server?
25. What steps do you take to ensure database backup and restore procedures are reliable and efficient?
26. Can you describe the process of partitioning tables in SQL Server and its benefits?
27. How do you use Dynamic Management Views (DMVs) to monitor SQL Server performance?
28. What is your approach to handling and optimizing tempdb in SQL Server?
29. Explain the concept of SQL Server log shipping and how you would set it up.
30. How would you perform a root cause analysis for a performance issue in SQL Server?
31. Can you detail the process of configuring and managing SQL Server Audit?
32. What are the different isolation levels in SQL Server, and how do they impact performance?
33. How do you manage and troubleshoot SQL Server memory usage?
34. How would you identify and troubleshoot a SQL Server performance issue caused by high CPU usage?
35. What strategies would you use to optimize the performance of a SQL Server database that has grown significantly in size?
36. How do you approach optimizing SQL Server memory usage?
37. What methods do you use to monitor SQL Server performance on an ongoing basis?
38. How do you handle and optimize SQL Server tempdb usage?
39. What are some common causes of SQL Server slow performance, and how would you resolve them?
40. How would you approach the process of indexing a large SQL Server table to improve query performance?
41. How do you use SQL Server Performance Monitor to identify and resolve performance bottlenecks?
42. What steps do you take to ensure that your SQL Server databases are performing optimally during high concurrency periods?
43. Can you explain the steps you take to analyze and optimize a query in SQL Server?
44. How do you identify and eliminate performance bottlenecks in SQL Server queries?
45. What is the role of execution plans in query optimization, and how do you use them?
46. How do you use indexing to improve query performance in SQL Server?
47. Can you describe how to use query hints for optimization in SQL Server?
48. What techniques do you use to optimize SQL Server queries that involve multiple joins?
49. How would you handle query optimization in a SQL Server database with a large amount of data?
50. What is parameter sniffing, and how can it affect query performance in SQL Server?
51. How do you optimize subqueries and nested queries in SQL Server?
52. Can you explain the impact of table statistics on query optimization and how you manage them?
53. How do you use the SQL Server Query Store for performance tuning and query optimization?
54. What methods do you use to optimize SQL Server queries that have high disk I/O?
55. Describe a time when you had to troubleshoot a critical database issue under pressure. What steps did you take, and what was the outcome?
56. How would you handle a situation where a database suddenly becomes unresponsive during peak business hours?
57. Can you give an example of a time you identified and resolved a performance bottleneck in a SQL Server database?
58. How have you managed database deployments in environments that require zero downtime?
59. Explain a scenario where you had to implement a complex security requirement in SQL Server. How did you approach it?
60. Describe a situation where you had to recover a database from a failure. What was your process, and what challenges did you face?
61. Discuss a time when you optimized a high-traffic SQL Server database. What techniques did you use?
62. How would you approach migrating a large, mission-critical SQL Server database with minimal downtime?
63. Can you provide an example of how you used SQL Server's built-in tools to monitor and improve database performance?
64. Describe a time when you had to manage and optimize a SQL Server database with high transaction volumes.
65. Have you ever encountered a situation where a database design was causing issues? How did you resolve it?