

# Sqlquestions

1. \*\*What is SQL Injection? How does it work?\*\* ■
2. \*\*What are the different types of SQL Injection?\*\* ■
  - Classic SQLi ■
  - Blind SQLi ■
  - Time-based SQLi ■
  - Error-based SQLi ■
3. \*\*How can you prevent SQL Injection in an application?\*\* ■
4. \*\*What are prepared statements and how do they help prevent SQL Injection?\*\* ■
5. \*\*What role does input validation play in preventing SQL attacks?\*\* ■
6. \*\*How does a Web Application Firewall (WAF) help prevent SQL Injection?\*\* ■
7. \*\*What is parameterized querying? Provide an example in SQL.\*\* ■
8. \*\*Can you explain the difference between White-listing and Black-listing input validation?\*\* ■
9. \*\*What is the impact of SQL Injection on a database?■
10. \*\*What are the best practices for securing a database?\*\* ■
11. \*\*How do you implement Role-Based Access Control (RBAC) in SQL?\*\* ■
12. \*\*What is the principle of Least Privilege in database security?\*\* ■
13. \*\*How can you restrict user permissions in SQL?\*\* ■
14. \*\*What are stored procedures, and how do they help in security?\*\* ■
15. \*\*How do you audit user activities in a database?\*\* ■
16. \*\*What are SQL GRANT and REVOKE statements? How are they used?\*\* ■
17. \*\*What is Database Encryption? What are the types of encryption in SQL databases?\*\* ■
18. \*\*How do Transparent Data Encryption (TDE) and Column-Level Encryption work?\*\* ■
19. \*\*How can you prevent privilege escalation in SQL?\*\* ■
20. \*\*What is Data Masking, and how is it used in SQL databases?\*\* ■
21. \*\*What is the difference between hashing and encryption in database security?\*\* ■
22. \*\*How do GDPR and HIPAA regulations impact database security?\*\* ■
23. \*\*What is SQL Database Auditing? Why is it important?\*\* ■
24. \*\*How can you detect suspicious activities in an SQL database?\*\* ■
25. \*\*What are database security best practices for cloud-based databases?\*\* ■
26. \*\*How do you prevent unauthorized access to database backups?\*\* ■
27. \*\*What is the difference between database-level and application-level security?\*\* ■
28. \*\*What is a Man-in-the-Middle (MITM) attack in SQL? How do you prevent it?\*\* ■
29. \*\*What is a Timing Attack, and how can it be used in SQL?\*\* ■

30. **\*\*What is a NoSQL Injection? How does it differ from SQL Injection?\*\*** ■
31. **\*\*How do you protect a database from insider threats?\*\*** ■
32. **\*\*What are the security risks of using dynamic SQL?\*\*** ■
33. **\*\*What are the risks of exposing database error messages to users?\*\*** ■
34. **\*\*How can you secure database connections over a network?\*\*** ■
35. **\*\*What is the role of database firewalls in cybersecurity?\*\*** ■
36. **\*\*How does SQL Server Always Encrypted protect sensitive data?\*\*** ■
37. **\*\*What are shadow databases, and how can they pose a security risk?\*\*** ■
38. **\*\*How would you detect if a system is under an SQL Injection attack?\*\*** ■
39. **\*\*A company experiences a data breach due to SQL Injection. What steps should they take to prevent future incidents?** ■
40. **\*\*You find that a user has access to more data than necessary. How would you resolve this issue?** ■
41. **\*\*How would you secure API endpoints that interact with a SQL database?\*\*** ■
42. **\*\*You suspect that an attacker is trying to exploit a timing-based SQL Injection. What do you do?** ■
43. **\*\*How would you ensure secure authentication and authorization in a database-driven web application?** ■
44. **\*\*What logging and monitoring techniques would you use to detect SQL security threats?** ■
45. **\*\*You are asked to secure a legacy database with poor security practices. What steps would you take?** ■