



SQL Server Training Content

This document provides the details of SQL topics which will be covered in class.

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1. Connecting to SQL Server using SSMS.
2. Creating altering and dropping a database.
3. Working with SQL Tables.
4. What is constraint and how to add constraint.
5. What is Cascading referential integrity constraint. Why it's important.
6. Adding a check constraint.
7. What is unique constraint.
8. What is identity column. How to set the identity column.
9. Get the last inserted row identity.
10. Select, Insert, update, Group by Clause.
11. Joins in SQL server, type of joins. Example of each joins.
12. What is null in SQL and how to handle it.
13. Union and Union all difference.
14. What is SP, how to create SP.
15. Use O/p and return Parameter in SP.
16. Optional parameters in sql server stored procedures.
17. Advantages of stored procedures.
18. Functions in SQL Server.
19. LEFT, RIGHT, CHARINDEX and SUBSTRING functions in sql server.
20. Replicate, Space, Patindex, Replace and Stuff string functions in sql server 2008.

- 21.DateTime functions in SQL Server.
- 22.IsDate, Day, Month, Year and DateNameDateTime functions in SQL Server.
- 23.DatePart, DateAdd and DateDiff functions in SQL Server.
- 24.Cast and Convert functions in SQL Server.
- 25.Mathematical functions in sql server.
- 26.Except and not in SQL Server.
- 27.where and having in sql server
- 28.Scalar user defined functions in sql server.
- 29.Inline table valued functions in sql server.
- 30.Multi statement table valued functions in sql server.
- 31.Temporary tables in SQL Server.
- 32.Select into in sql server
- 33.Indexes in sql server.
- 34.Unique and Non Unique Indexes.
- 35.Advantages and disadvantages of indexes in sql server.
- 36.Views in sql server. Updatable views in sql server.
- 37.Indexed views in sql server.
- 38.View limitations in sql server.
- 39.Pivot in sql server 2008.
- 40.What is Trigger and types of triggers.
- 41.DML triggers in sql server. After update trigger.
- 42.Instead of insert trigger.
43. Instead of update triggers in sql server.
- 44.Instead of delete triggers in sql server.
- 45.Derived tables and common table expressions in sql server.
- 46.CTE in sql server. Updatable common table expressions in sql server.
- 47.Recursive CTE in sql server.
- 48.Database normalization.
- 49.Second normal form and third normal form.
- 50.Error handling in sql server.
- 51.Transactions in sql server. Transactions in sql server and ACID.
- 52.Subqueries in sql. Correlated subquery in sql.
- 53.Performance testing for subquery and joins.
- 54.User defined Table Type in SQL.

55. Cursors in sql server.
56. Alternate of cursors.
57. Merging in SQL.
58. Transactions in SQL. Concurrent transactions.
59. SQL server dirty read.
60. SQL server lost update issues.
61. Non Repeatable and phantom read in SQL server.
62. SQL server deadlock. Logging deadlock in SQL.
63. Deadlock prevention and analysis. Using profiler for deadlock.
64. Find Blocking queries in SQL.
65. Triggers in SQL Server. DDL triggers. Audit table triggers.
66. Logon Triggers in SQL Server
67. Rollup and Cube.
68. Debugging SQL Server.
69. Difference between 2005/2008/2012/2014.