

Topics	Date(MM/DD/YYYY)
Basic discussion on database systems.	03/07/2019
Comparison between file systems and Relational data bases; OLTP vs OLAP	
Explain the Relationships in a sample DB	
Data Definition Language (DDL)	
Data Manipulation Language (DML)	
Data Query Language (DQL)	
Data Control Language (DCL)	
Transaction Control Language (TCL)	
Creating Database	
Restore Database	
Data Types in SQL	03/08/2019
Introduction to basic Select statement - All clause	
Where Clause	
basic Operators, in , between , like	
Order of Processing of Queries	03/11/2019
Group By Clause, Distinct	
Having Clause	
Order by clause, Top	
Aggregate functions	03/13/2019
Usage of case when	
String Functions, Date Functions, Conversion Functions, FORMAT function	
Derived Tables	
Primary and Unique key, Surrogate Key, Natural Key	03/15/2019
Referential Keys	
Schemas	

Simple/Inner Joins	03/18/2019
Left Outer	
Right Outer	
Full Join	
Cross Join	03/20/2019
Cross/Outer Apply	
Sub queries	
Co-related Sub Queries	
Exists Clause	
Rank, Dense Rank, Ntile, Row_Number, Top (Analytical), OVER Clause	03/22/2019
SQL 2016,2017 Functions	
CTE, Recursive CTE	
INSERT, DELETE, UPDATE, MERGE, Alter, Truncate	
Differences Between Delete and Truncate	
Indexes	03/25/2019
Constraints	
Defaults	
Column level and table Level Constraints	
Views	
Indexed views	
Normal Forms	
Synonyms	
Codd rules	
Stored Procedures	
In put and out put parameters	
Control statements - If, ELSE, WHILE	

Cursors	03/27/2019
Temporary tables - #Tables	
Table Variables	
OUTPUT clause	03/29/2019
Error Handling (TRY ...CATCH)	
- RAISERROR	
- THROW	
SP_executeSQL	
Dynamic queries	
Parameterized Dynamic queries	
SQL Injection	
Transaction Management	04/01/2019
Isolation Levels /ACID Properties/Dirty Reads/Phantom Reads/Dead locks	
Begin Transaction	
Commit Transaction	
Rollback Transaction	
Save Transaction	
Implicit Transactions	
Scalar valued Functions	04/03/2019
Table valued functions	
Triggers, , OFFSET FETCH	
XML Operations (AUTO,EXPLICIT,RAW)	
MERGE	
Rollup, Cube, Grouping Sets	
Exercise review	04/04/2019
Exercise review	04/05/2019

SQL Profiler Usage	04/08/2019
Execution Plan	
Performance Monitor	