SIX WEEKS TRAINING IN DBMS/SQL
IDE: SQL 10g, SQL 11i
Database: MySQL, Oracle

Introduction to SQL:
- Traditional approach and its limitations
- Database and its features
- Advantages and model of database
- ER-Models
- Keys(primary, foreign, unique)

DBMS:
- Introduction to software's
- Working in IDE
- Login description
- Syntax of query, query details

DDL(Data Definition Language):
- CREATE - to create objects in the database
- ALTER - alters the structure of the database
- DROP - delete objects from the database
- TRUNCATE - remove all records from a table, including all spaces allocated for the records are removed
- COMMENT - add comments to the data dictionary
- RENAME - rename an object

DML(Data Manipulation Language):
- SELECT - retrieve data from the a database
- INSERT - insert data into a table
- UPDATE - updates existing data within a table
- DELETE - deletes all records from a table, the space for the records remain
- MERGE - UPSERT operation (insert or update)
- CALL - call a PL/SQL or Java subprogram
- EXPLAIN PLAN - explain access path to data
- LOCK TABLE - control concurrency

DCL(Data Control Language):
- GRANT - gives user's access privileges to database
- REVOKE - withdraw access privileges given with the GRANT command

TCL(Transaction Control Language):
- COMMIT - save work done
- SAVEPOINT - identify a point in a transaction to which you can later roll back
- ROLLBACK - restore database to original since the last COMMIT
- SET TRANSACTION - Change transaction options like isolation level and what rollback segment to use

Joins and Queries:
- Cross Join
- Natural Join
- Inner Join
- Equi-Join
- Outer Join(Right Outer Join, Full Outer Join)
- Self Join
- Nested Queries

Introduction to PL/SQL:
- Features of PL/SQL
- Advantages of PL/SQL
- Software Installation and setting up Environment

PL/SQL Program Unit:
- PL/SQL anonymous block
- Functions
- Procedure
- Package
- Trigger

Data Types:
- Numeric Variables
- Character Variables
- Data Variables
- Exceptions
- Data Types for specific Columns

Conditional Statements:
- If
- If-then-else
- If-then-elseif
- Case statement
- Nested If-then-else

Cursors:
- Implicit Cursors
- Explicit Cursors

Array Handling:
- Associative Arrays
- Nested Tables
- Varrays(Variable Size Arrays)

Looping:
- LOOP statements
- FOR loop
- Cursor FOR loops