
PostgreSQL

Duration- 4 Weeks

CONCEPTS OF DBMS, DATABASE, RDMS

- CONCEPT OF DATABASE
- CONCEPT OF DBMS
- ADVANTAGE OF DBMS
- CONCEPT OF RDBMS

CREATING TABLE AND ADDING CONSTRAINTS INTO THE TABLES

- TYPES OF SQL COMMANDS
- CREATING TABLE
- ADDING CONSTRAINTS
- INSERT RECORDS

BASIC SQL STATEMENTS

- SELECT WITH ALL COLUMNS
- SELECT WITH SPECIFIC COLUMNS
- ARITHMETIC OPERATIONS
- COLUMN ALIAS

RESTRICTING AND SORTING DATA

- WHERE CLAUSE
- AND OPERATOR
- NULL, LIKE OTHERS
- ORDER BY CLAUSE

SINGLE ROW FUNCTIONS

- TO_CHAR
- TO_DATE
- NVL
- OTHERS

DISPLAYING DATA FROM MULTIPLE TABLES

- TYPES OF JOIN AND THEIR QUERIES

AGGREGATE DATA USING GROUP FUNCTIONS

- SUM()
- AVG()
- MIN()
- MAX()

SUBQUERIES

- CONCEPT OF SUBQUERIES AND EXAMPLES

MANIPULATING DATA

- INSERT
- UPDATE
- DELETE
- TCL COMMANDS

CREATING VIEWS AND INDEXES

- DIFFERENCE BETWEEN VIEWS AND TABLES
- SIMPLES VIEW
- COMPLEX VIEW
- BTREE

SET OPERATORS

- UNION
- UNION ALL
- INTERSECT
- MINUS

POSTGRESQL PYTHON INTERFACE

- Installation of Python (Anaconda)
- Connecting to Database
- Creating Tables
- Insertion of Data
- Selection of Data for display
- Updating Dataset
- Deletion of Data