

PostgreSQL / MySQL

Database Management

- Connection commands
- Creating and managing databases
- Database listing and switching

Table Operations

- Creating tables with proper syntax
- Listing and describing tables
- Altering tables (adding/modifying/dropping columns)
- Dropping and truncating tables

Data Manipulation

- INSERT operations (single and multiple rows)
- SELECT queries with various clauses
- UPDATE and DELETE operations
- JOIN types (INNER, LEFT, RIGHT, FULL, CROSS, SELF)

Database Objects

- Indexes (creating, listing, dropping)
- Constraints (PRIMARY KEY, FOREIGN KEY, UNIQUE, CHECK, NOT NULL)
- Transactions (BEGIN, COMMIT, ROLLBACK, SAVEPOINTS)
- Views and Functions

Common Functions

- String manipulation
- Date/time functions
- Numeric functions
- Aggregate functions

Advanced Features

- Subqueries

- Common Table Expressions (CTEs)
- User management
- Backup and restoration
- Database-specific features for PostgreSQL and MySQL

Performance Tips

- Query optimization with EXPLAIN
- Best practices for database management