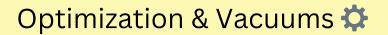
Warehousing and SQL Concepts in

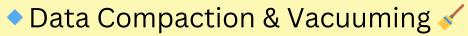
- Data Warehousing Basics
 - Centralized storage for structured data.
 - Used for analytics and reporting.
 - Supports OLAP (Online Analytical Processing).



- Reducing query execution time.
- Optimizing SELECT, JOIN, and WHERE clauses.
- Using EXPLAIN PLAN to analyze queries.
- Indexing and Partitioning
- Indexing speeds up searches.
- Partitioning divides large tables for better performance.
- Types: Range, List, Hash, and Composite partitioning.



- Query Performance Tuning @
 - Eliminating unnecessary computations.
 - Using proper indexing and partitioning.
 - Avoiding SELECT * and optimizing JOINs.



- Removes deleted or obsolete data.
- Reduces storage size and improves performance.
- In databases like PostgreSQL, VACUUM reclaims space.
- Caching Strategies
- Storing frequently accessed data in memory.
- Reducing redundant computations.
- Using materialized views and query caching.