Database Optimization Guide

Query Optimization

1. Use proper indexes
2. Write efficient queries
3. Avoid SELECT *
4. Use EXPLAIN to analyze queries
5. Optimize JOIN operations

Database Design

1. Proper normalization
2. Appropriate data types
3. Efficient relationships
4. Smart indexing strategies
5. Partitioning considerations

Performance Tuning

1. Cache optimization
2. Memory management
3. Disk I/O optimization
4. Connection pooling
5. Query cache settings