

MySQL DBA 30 Days Study Plan & Practical Lab Guide

Production-Level Database Administration Learning

Introduction

This document provides a structured 30-day roadmap and hands-on lab guide to help you become a production-ready MySQL DBA.

30 Days Learning Plan

Week 1: Fundamentals & Architecture

- 1 Day 1: Installation & Basics
- 2 Day 2: Architecture Overview
- 3 Day 3: File Structure & Logs
- 4 Day 4: Users & Security
- 5 Day 5: Tables & Indexes
- 6 Day 6: Administration Commands
- 7 Day 7: Revision & Documentation

Week 2: Backup & Recovery

- 1 Day 8: Backup Concepts
- 2 Day 9: mysqldump Backup
- 3 Day 10: Restore Practice
- 4 Day 11: Binary Logs
- 5 Day 12: PITR
- 6 Day 13: Physical Backup
- 7 Day 14: Disaster Recovery Drill

Week 3: Replication & Performance

- 1 Day 15: Replication Theory
- 2 Day 16: Setup Replication
- 3 Day 17: Troubleshooting
- 4 Day 18: High Availability
- 5 Day 19: Query Tuning
- 6 Day 20: Server Tuning
- 7 Day 21: Monitoring

Week 4: Production Management

- 1 Day 22: Version Management

- 2 Day 23: Upgrade
- 3 Day 24: Migration
- 4 Day 25: Migration Tools
- 5 Day 26: Patching
- 6 Day 27: Security Hardening
- 7 Day 28: DR Planning
- 8 Day 29: Production Checklist
- 9 Day 30: Final Project

Daily Practical Lab Guide

Installation & Setup

- Install MySQL Server
- Configure my.cnf
- Start/Stop Service
- Secure Installation

Backup & Restore

- Take full backup using mysqldump
- Restore database
- Enable binary log
- Perform PITR

Replication & HA

- Configure Primary-Replica
- Monitor replication status
- Test failover
- Fix broken replication

Performance & Monitoring

- Enable slow query log
- Optimize queries
- Tune buffer pool
- Monitor resource usage

Upgrade & Migration

- Upgrade MySQL version
- Migrate database
- Validate data
- Rollback test

Production Readiness

- Setup automated backup
- Test DR
- Create runbook
- Security audit

Recommended Daily Study Format

- 1 Theory: 1 Hour
- 2 Hands-on Lab: 1.5 Hours
- 3 Notes Making: 30 Minutes
- 4 Troubleshooting: 30 Minutes

Conclusion

Following this plan consistently will help you gain strong practical and production-level MySQL DBA skills within 30 days.