# MYSQL and Linux in One Week

## MYSQ for ALL

- 1. What is a database? & What is SQL?
- 2. MySQL Workbench Tutorial & MySQL Introduction
- 3. Database Design Tutorial: Learn Data Modeling
- 4. What is Normalization? 1NF, 2NF, 3NF & BCNF with Examples
- 5. What is ER(Entity-relationship) Modeling? Learn with Example
- 6. MySQL Create Database & MySQL Data Types
- 7. MySQL SELECT Statements with Examples
- 8. MySQL WHERE Clause with Examples AND, OR, IN, NOT IN
- 9. MySQL query INSERT INTO Table with Examples
- 10. MySQL UPDATE & DELETE Query with Example
- 11. Sorting in MySQL: ORDER BY, DESC and ASC
- 12. MySQL GROUP BY and HAVING Clause Tutorial
- 13. MySQL Wildcards Tutorial: Like, NOT Like, Escape, (%), (\_)
- 14. MYSQL Regular Expressions (REGEXP) with Syntax & Examples
- 15. MySQL Functions & Procedures: String, Numeric, Userdefined, Stored
- 16. MySQL Aggregate Functions Tutorial: SUM, AVG, MAX, MIN, COUNT, DISTINCT
- 17. MySQL IS NULL & IS NOT NULL Tutorial with Examples
- 18. MySQL AUTO\_INCREMENT Tutorial with Examples
- 19. MYSQL ALTER, DROP, RENAME, MODIFY
- 20. MySQL LIMIT & OFFSET Tutorial with Examples
- 21. MySQL SubQuery Tutorial with Examples
- MySQL JOINS Tutorial: INNER, OUTER, LEFT, RIGHT, CROSS MySQL UNION - Complete Tutorial
- 23. Views in MySQL Tutorial: Create, Join & Drop with Examples
- 24. MySQL INDEXES Create, Drop & Add Index Tutorial

# Reference:

- 1. <a href="https://www.guru99.com/mysql-tutorial.html">https://www.guru99.com/mysql-tutorial.html</a>
- 2. <a href="https://www.w3resource.com/sql-exercises/">https://www.w3resource.com/sql-exercises/</a>
- 3. <a href="http://sqlfiddle.com/">http://sqlfiddle.com/</a>
- 4. https://www.hackerrank.com/domains/sql

## Linux for all

- 1. Introduction to the Linux Operating System
- 2. How to Download & Install Linux (Ubuntu) in Windows
- 3. Linux vs Windows: What's the Difference?
- 4. Linux Command Line Tutorial: Manipulate Terminal with CD Commands
- 5. File Permissions in Linux/Unix with Example
- 6. Input Output Redirection in Linux/Unix Examples
- 7. Pipe, Grep and Sort Command in Linux/Unix with Examples
- 8. Linux Regular Expression Tutorial: Grep Regex Example
- 9. List of Environment Variables in Linux

- 10. Linux/Unix SSH, Ping, FTP, Telnet Communication Commands
- 11. Telnet vs SSH: Key Differences
- 12. Linux/Unix Process Management: ps, kill, top, df, free, nice Commands
- 13. VI Editor with Commands in Linux/Unix Tutorial
- 14. Shell Scripting Tutorial: How to Create Shell Script in Linux/Unix
- 15. Linux/Unix Virtual Terminal
- 16. Linux/Unix User Administration Tutorial: adduser, usermod, userdel
- 17. Unix Vs. Linux: What's the Difference?
- 18. Crontab in Linux: Job Scheduling EXAMPLES
- 19. VM Setup for practice environment
- 20. Monitoring Hardware Resources (RAM, CPU, Network, and I/O), File Movements (scp, rsync)

## References:

- 1. <a href="https://www.guru99.com/must-know-linux-commands.html">https://www.guru99.com/must-know-linux-commands.html</a>
- 2. <a href="https://www.guru99.com/file-permissions.html">https://www.guru99.com/file-permissions.html</a>
- 3. <a href="https://www.guru99.com/linux-redirection.html">https://www.guru99.com/linux-redirection.html</a>
- 4. <a href="https://www.guru99.com/linux-pipe-grep.html">https://www.guru99.com/linux-pipe-grep.html</a>
- 5. <a href="https://www.guru99.com/linux-regular-expressions.html">https://www.guru99.com/linux-regular-expressions.html</a>
- 6. <a href="https://www.guru99.com/linux-environment-variables.html">https://www.guru99.com/linux-environment-variables.html</a>
- 7. <a href="https://www.guru99.com/unix-linux-tutorial.html">https://www.guru99.com/unix-linux-tutorial.html</a>
- 8. <a href="https://www.tutorialspoint.com/unix/index.htm">https://www.tutorialspoint.com/unix/index.htm</a>

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