MySQL Interview Questions

Basic Level Questions

- What is MySQL?
- What are the different data types in MySQL?
- What is the difference between CHAR and VARCHAR?
- What is a primary key?
- What is a foreign key?
- What is the difference between WHERE and HAVING clauses?
- What is the default port for MySQL?
- How do you create a database in MySQL?
- What is the difference between DELETE, TRUNCATE, and DROP?
- What are indexes in MySQL and why are they used?
Intermediate Level Questions
- How do INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL JOIN work?
- What is normalization? Explain different normal forms.
- What is denormalization?
- What is the difference between UNION and UNION ALL?

MySQL Interview Questions

- How can you improve the performance of a MySQL query?
- What is the difference between IN and EXISTS?
- What is a stored procedure?
- How do you implement transactions in MySQL?
- What is ACID property in databases?
- What is the difference between MyISAM and InnoDB storage engines?
Advanced Level Questions
- How do you perform indexing on large datasets?
- Explain query execution plan and how to analyze it using EXPLAIN.
- What are triggers in MySQL? How do you create them?
- What are views in MySQL and when would you use them?
- What are user-defined functions (UDFs)?
- How can you handle deadlocks in MySQL?
- How do you secure a MySQL database?
- What are common causes of slow queries in MySQL?
- How do you backup and restore MySQL databases?

MySQL Interview Questions

- What are common replication types in MySQL (e.g., master-slave, master-master)?

Practical Query Challenges

- Write a query to get the top 5 highest salaries from an employee table.
- Write a query to find duplicate records in a table.
- Write a query to update data in one table based on data in another table.
- Write a query to calculate total sales per month from a sales table.
- Write a subquery and a correlated subquery.