



# **MySQL Workbench**

## **Syllabus Overview**

## (Month One) SQL.

Week One	Week Two
<p>Day 1 (Data Retrieval: Single Table) -</p> <ul style="list-style-type: none"><li>• Import Dataset in MySQL</li><li>• SELECT, WHERE, DISTINCT, LIKE</li><li>• BETWEEN, IN, ORDER BY, LIMIT</li><li>• MIN, MAX, AVG, GROUP BY</li><li>• HAVING Clause</li><li>• IF, CASE, YEAR, CURYEAR</li></ul>	<p>Day 1 (Complex Queries) -</p> <ul style="list-style-type: none"><li>• Subqueries</li><li>• ANY, ALL Operators</li><li>• Co-Related Subquery</li><li>• Common Table Expression</li></ul>
<p>Day 2 (Multiple Table) -</p> <ul style="list-style-type: none"><li>• INNER, LEFT, RIGHT, FULL</li><li>• Cross Join</li><li>• Analytics on Tables</li><li>• Join More Than Two Tables</li></ul>	<p>Day 2 (Database Creation) -</p> <ul style="list-style-type: none"><li>• Database Normalization</li><li>• Data Integrity</li><li>• Entity Relationship Diagram</li><li>• INT, DECIMAL, FLOAT, DOUBLE</li><li>• VARCHAR, CHAR, ENUM</li><li>• DATE, TIME, YEAR, TIMESTAMP</li><li>• Data Types: JSON, Spatial</li><li>• Primary Key</li><li>• Foreign Key</li></ul>

Week Three	Week Four
<p><b>Day 1 (Analytics I) -</b></p> <ul style="list-style-type: none"> <li>• <b>User-Defined SQL Functions</b></li> </ul>	<p><b>Day 1 (Analytics II) -</b></p> <ul style="list-style-type: none"> <li>• <b>Database Triggers</b></li> <li>• <b>Database Events</b></li> <li>• <b>Forecast Accuracy Report</b></li> <li>• <b>Subquery vs CTE vs Views</b></li> <li>• <b>Database Indexes</b></li> </ul>
<p><b>Day 2 (Window Functions) -</b></p> <ul style="list-style-type: none"> <li>• <b>Database Views</b></li> <li>• <b>Window Functions</b></li> <li>• <b>ROW_NUMBER, DENSE_RANK</b></li> </ul>	<p><b>Day 2 (SQL Advance) -</b></p> <ul style="list-style-type: none"> <li>• <b>Relational vs No-SQL</b></li> <li>• <b>ETL</b></li> <li>• <b>Data Warehouse</b></li> <li>• <b>OLAP vs OLTP</b></li> <li>• <b>Data Catalog</b></li> <li>• <b>Fact vs Dimension Table</b></li> <li>• <b>Star vs Snowflake Schema</b></li> <li>• <b>Kanban</b></li> </ul>