

Week-5

Domain: **Sql Database**

Weekly Activities:

1. Hacker Rank
2. Practice Typing

Week 5 Technical Workout Schedule:

Day	Topics	Assignments
1	Day 1: Introduction to SQL Learn the basic concepts of SQL, including data types, tables, and basic SQL syntax. Understand how to create and manipulate tables, as well as insert and retrieve data using basic SQL commands. Practice writing basic SQL queries to filter and sort data.	
2	Day 2: Filtering Data Learn how to use WHERE clauses to filter data based on specific criteria. Understand how to use comparison operators, logical operators, and wildcards to filter data. Practice writing more complex SQL queries using WHERE clauses. Learn how to use the ORDER BY clause to sort data. Understand how to sort data in ascending and descending order. Practice writing SQL queries that sort data based on one or more columns.	
3	Day 3: Aggregating Data Learn how to use aggregate functions like COUNT, SUM, AVG, MIN, and MAX to perform calculations on your data. Understand how to use GROUP BY clauses to group data based on one or more columns. Practice writing SQL queries that perform calculations and group data	

Day	Topics	Assignments
4	<p>Day 4: Joining Tables</p> <p>Learn how to use JOIN clauses to combine data from two or more tables.</p> <p>Understand the different types of JOINS, including INNER JOIN, LEFT JOIN, RIGHT JOIN, and FULL OUTER JOIN.</p> <p>Practice writing SQL queries that join data from multiple tables.</p>	
5	<p>Day 5: Subqueries and Views</p> <p>Learn how to use subqueries to write more complex SQL queries.</p> <p>Understand how to create views to simplify complex SQL queries and provide a more user-friendly interface.</p> <p>Practice writing SQL queries that use subqueries and creating views.</p>	
6	<p>Day 6: Transactions and Concurrency Control</p> <p>Learn how to use transactions to ensure data integrity and consistency in your database.</p> <p>Understand how to use the COMMIT and ROLLBACK statements to manage transactions.</p> <p>Learn about concurrency control and how it helps manage access to shared resources in a database.</p> <p>Practice writing SQL queries that use transactions and understanding the impact of concurrency control on database performance.</p>	
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