

[Catalog](#) / [Roadmaps](#) / [SQL Roadmap for Data Analysis](#)

# SQL Roadmap for Data Analysis

Learn SQL to analyse and manipulate large data with our real-world case studies-based practical course. Solve over 200+ query-related exercises. Learn basic Python for advanced data analysis.


 Coding Problems: 647+ Total Courses: 6[Syllabus](#)[Reviews \(3\)](#)[FAQs](#)



LEVEL 1



## Basic SQL

### Learn to write queries

Start the journey with getting a strong command over SQL. The faster you are with the syntax, the more you can spend time thinking about the right logic to apply.

[Learn SQL](#) ➔ Learn Course • 99 Problems

-  Introduction to SQL - Creating a table
-  Manipulation - Alter / Update / Delete / Constraints











[Start Roadmap Now](#) 50k+ learners enrolled already 6 courses 647 problems

### Any pre-requisites required to start?

None

### IN THIS ROADMAP

[Learn SQL](#)[Learn Advanced SQL](#)

-  Practice project: Supermarket customers
-  Queries on Select, Distinct, Where and Between
-  Logical statements with 'Where'
-  Miscellaneous queries
-  Practice project: Food delivery
-  Aggregate functions - count, max, min, round
-  Aggregate functions - sum, avg
-  Group by
-  Having
-  Practice project: Student database



## SQL Online Test and Quiz

Skill test • 17 Questions • 1 Hrs



LEVEL 2

## Advanced SQL

Learn to analyse complex data

Learn advance querying techniques like joins, sub queries and set operations to put yourself on the path to mastery in SQL.

SQL Practice Queries

SQL at Work

SQL case studies

Top SQL Interview Questions



## Learn Advanced SQL [↗](#)

Learn Course • 141 Problems

- Multiple tables
- Normalization and ER diagrams
- Subqueries
- Set Operations
- Aggregates continued
- Window Functions
- Practice case studies



## SQL Practice Queries [↗](#)

Practice Course • 92 Problems

- Basic Commands
- Case Study - CodeChef Database
- Case Study - ABC Cab booking App
- Case Study - Happy Haven House Rental App
- Case Study - Library Management System



LEVEL 3


## SQL in real life





### Solve real world problems

As you now have much better understanding of advanced concepts, let us practice the real life case studies with SQL.




### SQL at Work [↗](#)







 Learn Course • 53 Problems

-  Analytics using SQL
-  Case study: Business
-  Case study: Operations
-  Case study: Marketing



### SQL case studies [↗](#)

 Practice Course • 192 Problems

-  Case Study - Cinema Hall
-  Case Study - Online Education Courses
-  Case Study - Fantasy Role Playing Game
-  Case Study - Company Recession
-  Case Study - Sales Analysis of E-commerce Platform
-  Case Study - Music App



## Top SQL Interview Questions [↗](#)

✂ Practice Course • 70 Problems

- 📄 SELECT statements and basic querying
- 📄 Joins (INNER, LEFT, RIGHT, FULL OUTER)
- 📄 Aggregation functions (COUNT, SUM, AVG, etc.)
- 📄 GROUP BY and HAVING clauses
- 📄 Subqueries
- 📄 UNION and UNION ALL
- 📄 Indexing and query optimization
- 📄 Data manipulation (INSERT, UPDATE, DELETE)
- 📄 Table creation and data definition language (DDL)
- 📄 Views and temporary tables
- 📄 Window functions
- 📄 Stored procedures and functions
- 📄 Triggers
- 📄 Transactions and ACID properties

Related roadmaps