

# SQL Fundamentals Practice Problems - Platform Links

## LeetCode SQL Problems

### Basic SELECT Problems:

1. **Recyclable and Low Fat Products** - <https://leetcode.com/problems/recyclable-and-low-fat-products/>
2. **Find Customer Referee** - <https://leetcode.com/problems/find-customer-referee/>
3. **Big Countries** - <https://leetcode.com/problems/big-countries/>
4. **Article Views I** - <https://leetcode.com/problems/article-views-i/>
5. **Invalid Tweets** - <https://leetcode.com/problems/invalid-tweets/>

### WHERE Clause & Filtering:

6. **Replace Employee ID With The Unique Identifier** - <https://leetcode.com/problems/replace-employee-id-with-the-unique-identifier/>
7. **Product Sales Analysis I** - <https://leetcode.com/problems/product-sales-analysis-i/>
8. **Customer Who Visited but Did Not Make Any Transactions** - <https://leetcode.com/problems/customer-who-visited-but-did-not-make-any-transactions/>
9. **Rising Temperature** - <https://leetcode.com/problems/rising-temperature/>
10. **Sales Person** - <https://leetcode.com/problems/sales-person/>

### Pattern Matching & String Operations:

11. **Patients With a Condition** - <https://leetcode.com/problems/patients-with-a-condition/>
12. **Fix Names in a Table** - <https://leetcode.com/problems/fix-names-in-a-table/>
13. **Group Sold Products By The Date** - <https://leetcode.com/problems/group-sold-products-by-the-date/>

### ORDER BY & LIMIT:

14. **Customer Placing the Largest Number of Orders** - <https://leetcode.com/problems/customer-placing-the-largest-number-of-orders/>
15. **Biggest Single Number** - <https://leetcode.com/problems/biggest-single-number/>
16. **Not Boring Movies** - <https://leetcode.com/problems/not-boring-movies/>

### Multiple Conditions & Logical Operators:

17. **Triangle Judgement** - <https://leetcode.com/problems/triangle-judgement/>
18. **Combine Two Tables** - <https://leetcode.com/problems/combine-two-tables/>

19. **Employees Earning More Than Their Managers** - <https://leetcode.com/problems/employees-earning-more-than-their-managers/>
20. **Duplicate Emails** - <https://leetcode.com/problems/duplicate-emails/>

### **LeetCode SQL 50 Study Plan:**

- **Main Link:** <https://leetcode.com/studyplan/top-sql-50/>
  - **All SQL Problems:** <https://leetcode.com/problem-list/sql/>
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## **HackerRank SQL Problems**

### **Basic Select Section:**

1. **Revising the Select Query I** - <https://www.hackerrank.com/challenges/revising-the-select-query/>
2. **Revising the Select Query II** - <https://www.hackerrank.com/challenges/revising-the-select-query-2/>
3. **Select All** - <https://www.hackerrank.com/challenges/select-all-sql/>
4. **Select By ID** - <https://www.hackerrank.com/challenges/select-by-id/>
5. **Japanese Cities' Attributes** - <https://www.hackerrank.com/challenges/japanese-cities-attributes/>
6. **Japanese Cities' Names** - <https://www.hackerrank.com/challenges/japanese-cities-name/>
7. **Weather Observation Station 1** - <https://www.hackerrank.com/challenges/weather-observation-station-1/>
8. **Weather Observation Station 3** - <https://www.hackerrank.com/challenges/weather-observation-station-3/>
9. **Weather Observation Station 4** - <https://www.hackerrank.com/challenges/weather-observation-station-4/>
10. **Weather Observation Station 5** - <https://www.hackerrank.com/challenges/weather-observation-station-5/>

### **Pattern Matching & String Operations:**

11. **Weather Observation Station 6** - <https://www.hackerrank.com/challenges/weather-observation-station-6/>
12. **Weather Observation Station 7** - <https://www.hackerrank.com/challenges/weather-observation-station-7/>
13. **Weather Observation Station 8** - <https://www.hackerrank.com/challenges/weather-observation-station-8/>
14. **Weather Observation Station 9** - <https://www.hackerrank.com/challenges/weather-observation-station-9/>

15. **Weather Observation Station 10** - <https://www.hackerrank.com/challenges/weather-observation-station-10/>
16. **Weather Observation Station 11** - <https://www.hackerrank.com/challenges/weather-observation-station-11/>
17. **Weather Observation Station 12** - <https://www.hackerrank.com/challenges/weather-observation-station-12/>

### **Advanced Filtering & Logical Operators:**

18. **Higher Than 75 Marks** - <https://www.hackerrank.com/challenges/more-than-75-marks/>
19. **Name of Students** - <https://www.hackerrank.com/challenges/name-of-students/>
20. **Employee Names** - <https://www.hackerrank.com/challenges/name-of-employees/>
21. **Employee Salaries** - <https://www.hackerrank.com/challenges/salary-of-employees/>

### **HackerRank Main SQL Section:**

- **Basic Select:** <https://www.hackerrank.com/domains/sql/select>
  - **All SQL Challenges:** <https://www.hackerrank.com/domains/sql>
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## **DataLemur SQL Problems**

### **Basic SQL Problems:**

1. **Laptop vs Mobile Viewership** - <https://datalemur.com/questions/laptop-mobile-viewership>
2. **Data Science Skills** - <https://datalemur.com/questions/matching-skills>
3. **Page With No Likes** - <https://datalemur.com/questions/sql-page-with-no-likes>
4. **Tesla Unfinished Parts** - <https://datalemur.com/questions/tesla-unfinished-parts>
5. **IBM db2 Product Analytics** - <https://datalemur.com/questions/sql-ibm-db2-product-analytics>

### **Filtering & Conditions:**

6. **Cities With Completed Trades** - <https://datalemur.com/questions/completed-trades>
7. **Average Post Hiatus (Part 1)** - <https://datalemur.com/questions/sql-average-post-hiatus-1>
8. **Teams Power Users** - <https://datalemur.com/questions/teams-power-users>
9. **Duplicate Job Listings** - <https://datalemur.com/questions/duplicate-job-listings>
10. **Pharmacy Analytics (Part 1)** - <https://datalemur.com/questions/top-profitable-drugs>

### **Sorting & Limiting:**

11. **Pharmacy Analytics (Part 2)** - <https://datalemur.com/questions/non-profitable-drugs>
12. **Pharmacy Analytics (Part 3)** - <https://datalemur.com/questions/total-drugs-sales>

13. **App Click-through Rate (CTR)** - <https://datalemur.com/questions/click-through-rate>
14. **Second Day Confirmation** - <https://datalemur.com/questions/second-day-confirmation>

### **DataLemur Practice Portal:**

- **Easy SQL Questions:** <https://datalemur.com/questions?category=SQL&difficulty=Easy>
  - **All SQL Questions:** <https://datalemur.com/questions?category=SQL>
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## **StrataScratch SQL Problems**

### **Basic SELECT & Filtering:**

1. **Salaries Differences** - <https://platform.stratascratch.com/coding/10308-salaries-differences>
2. **Finding Updated Records** - <https://platform.stratascratch.com/coding/10299-finding-updated-records>
3. **Workers With The Highest Salaries** - <https://platform.stratascratch.com/coding/10353-workers-with-the-highest-salaries>
4. **Churro Activity Date** - <https://platform.stratascratch.com/coding/9688-churro-activity-date>
5. **Count the number of movies** - <https://platform.stratascratch.com/coding/9650-count-the-number-of-movies>

### **WHERE Clause & Comparisons:**

6. **Admin Department Employees Beginning in April or Later** - <https://platform.stratascratch.com/coding/9845-find-the-number-of-employees>
7. **Find libraries who haven't provided the email address** - <https://platform.stratascratch.com/coding/9924-find-libraries-who-havent-provided-the-email-address>
8. **Customer Details** - <https://platform.stratascratch.com/coding/9891-customer-details>
9. **Finding User Purchases** - <https://platform.stratascratch.com/coding/10322-finding-user-purchases>
10. **Activity Rank** - <https://platform.stratascratch.com/coding/10351-activity-rank>

### **Pattern Matching & String Operations:**

11. **Find matching hosts and guests** - <https://platform.stratascratch.com/coding/10078-find-matching-hosts-and-guests>
12. **Find students with a median writing score** - <https://platform.stratascratch.com/coding/10075-find-students-with-a-median-writing-score>
13. **Bikes Last Used** - <https://platform.stratascratch.com/coding/10176-bikes-last-used>

### **ORDER BY & Advanced Filtering:**

14. **Top Percentile Fraud** - <https://platform.stratascratch.com/coding/10303-top-percentile-fraud>
15. **Largest Olympics** - <https://platform.stratascratch.com/coding/9782-customer-revenue-in-march>
16. **Customer Revenue In March** - <https://platform.stratascratch.com/coding/9782-customer-revenue-in-march>

### **StrataScratch Practice Portal:**

- **Easy SQL Problems:** [https://platform.stratascratch.com/coding?code\\_type=1&difficulty=1](https://platform.stratascratch.com/coding?code_type=1&difficulty=1)
  - **All SQL Problems:** [https://platform.stratascratch.com/coding?code\\_type=1](https://platform.stratascratch.com/coding?code_type=1)
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## **Additional Practice Resources**

### **W3Schools SQL Exercises:**

- **SQL SELECT:** [https://www.w3schools.com/sql/exercise.asp?filename=exercise\\_select1](https://www.w3schools.com/sql/exercise.asp?filename=exercise_select1)
- **SQL WHERE:** [https://www.w3schools.com/sql/exercise.asp?filename=exercise\\_where1](https://www.w3schools.com/sql/exercise.asp?filename=exercise_where1)
- **SQL ORDER BY:** [https://www.w3schools.com/sql/exercise.asp?filename=exercise\\_orderby1](https://www.w3schools.com/sql/exercise.asp?filename=exercise_orderby1)

### **SQLBolt Interactive Tutorial:**

- **Basic Queries:** [https://sqlbolt.com/lesson/select\\_queries\\_introduction](https://sqlbolt.com/lesson/select_queries_introduction)
- **Filtering:** [https://sqlbolt.com/lesson/select\\_queries\\_with\\_constraints](https://sqlbolt.com/lesson/select_queries_with_constraints)
- **Sorting:** [https://sqlbolt.com/lesson/select\\_queries\\_order\\_of\\_execution](https://sqlbolt.com/lesson/select_queries_order_of_execution)

### **PostgreSQL Specific Practice:**

- **PostgreSQL Tutorial Exercises:** <https://www.postgresqltutorial.com/postgresql-exercises/>
  - **PGExercises:** <https://pgexercises.com/>
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## **Recommended Practice Strategy**

### **Week 1: Foundations (20 problems)**

- Start with HackerRank Basic Select (Problems 1-10)
- Move to LeetCode Easy SELECT problems (Problems 1-5)
- Practice DataLemur Easy problems (Problems 1-5)

### **Week 2: Filtering & Conditions (25 problems)**

- Complete HackerRank Weather Station series (Problems 6-17)
- Work on LeetCode WHERE clause problems (Problems 6-10)
- Practice StrataScratch filtering problems (Problems 6-10)

### **Week 3: Advanced Combinations (20 problems)**

- Tackle LeetCode pattern matching (Problems 11-13)
- Complete DataLemur sorting problems (Problems 11-14)
- Work on StrataScratch advanced filtering (Problems 14-16)

### **Week 4: Mixed Practice (15 problems)**

- Random selection from all platforms
- Focus on combining multiple concepts
- Time yourself for interview preparation

## **Platform-Specific Tips**

### **LeetCode:**

- Focus on the SQL 50 study plan for structured learning
- Problems often test multiple concepts together
- Good for interview preparation

### **HackerRank:**

- Excellent for mastering basic syntax
- Weather Station series is perfect for pattern matching practice
- Clear progression from basic to advanced

### **DataLemur:**

- Real-world business scenarios
- Great for understanding practical applications
- Focus on data analyst/scientist interview questions

### **StrataScratch:**

- Mix of basic and complex problems
- Good variety of datasets
- Excellent for comprehensive practice

Start with the easier problems and gradually work your way up. Each platform offers unique advantages, so practicing across all of them will give you well-rounded SQL fundamentals mastery!