Learn More At Seattle Data Guy's Youtube Channel	Date Completed	Notes	Personal Difficulty 1-5
Intro			
This is a data engineering study guide that you can use to help prepare yourself for your interview. This was developed by people who have interviewed and gotten jobs at FAANGs and several other tech companeis. We hope these help you get great jobs as well. In order to use this, you can make a copy of this sheet and follow along with the study guide. Keeping track helps you know where you are and how you are doing.			
SQL - Problems			
262. Trips and Users			
Popularity of Hack			
Average Salaries			
626. Exchange Seats			
Number Of Bathrooms And Bedrooms - Airbnb			
Hackerrank The Report			
177. Nth Highest Salary			
Symmetric Pairs			
Occupations			
Placements			
Ollivander's Inventory			
SQL - Videos			
SQL Interview Question Walk Through			
IQ15: 6 SQL Query Interview Questions			
Learning about ROW_NUMBER and Analytic Functions			
Advanced Implementation Of Analytic Functions			
Advanced Implementation Of Analytic Functions Part 2			
Wise Owl SQL Videos			
Post Video SQL Problems			
Binary Tree Nodes			
Weather Observation Station 18			
Acceptance Rate By Date -Facebook			
Challenges			
Print Prime Numbers			
595. Big Countries			
626. Exchange Seats			
SQL Interview Questions: 3 Tech Screening Exercises (For Data Analysts)			
# Databases, ETL and Data Warehouses			
Designing A Traditional Relational Database Video			
Data Warehouse Design Video			
ETL Design Video			
Modern Data Infra Video			
Design a Database/ETL and DW for a:			
Dating App			
Bicycle Rental Service			
Music Streaming App			
Job Search Website			
Udemy like website			
# Data Engineering Project Ideas			
Basic Project - Webscraping Data From G2/W Snowflake And Tableau			
Basic Project Level 2 - Stock Market Real-Time Data Analysis Using Kafka | End-To-End Data Engineering Project			
# Algorithms And Data Structures			
Pre-Study Problems			
985. Sum of Even Numbers After Queries			
657. Robot Return to Origin			
961. N-Repeated Element in Size 2N Array			
110. Balanced Binary Tree			
3. Longest Substring Without Repeating Characters			
19. Remove Nth Node From End of List			
23. Merge k Sorted Lists			
31. Next Permutation			
Algorithms And Data Structures Videos			
Data Structures & Algorithms #1 - What Are Data Structures?			
Data Structures: Linked Lists			
Data Structures: Trees			

Data Structures: Heaps			
Data Structures: Hash Tables			
Data Structures: Stacks and Queues			
Data Structures: Crash Course Computer Science #14			
Data Structures: Tries			
Algorithms			
Python Algorithms for Interviews			
Algorithms: Graph Search, DFS and BFS			
Algorithms: Binary Search			
Algorithms: Recursion			
Algorithms: Bubble Sort			
Algorithms: Merge Sort			
Algorithms: Quicksort			
Big O Notation			
Introduction to Big O Notation and Time Complexity (Data Structures & Algorithms #7)			
Some Interview Walk Throughs			
Amazon Coding Interview Question - Recursive Staircase Problem			
Google Coding Interview - Universal Value Tree Problem			
Google Coding Interview Question and Answer #1: First Recurring Character			
Post-Study Problems			
Bigger Is Greater			
6. ZigZag Conversion			
7. Reverse Integer			
40. Combination Sum II			
43. Multiply Strings			
Larry's Array			
Short Palindrome			
65. Valid Number			
Nth Fibonacci			

Operational Programming Problems

Kangaroo Problem			
Breaking Records			
Find A String			
itertools.permutations()			
No Idea!			
Days of the programmer			
Leaderboard			
Word Order			
Sherlock And Squares			
Equalize The Array			
Apples And Oranges			
More Operational Style Questions			

System Design Videos

Tiny url			
Parking Lot System			
Whats App			
Uber design			
Instagram			
Tinder Service			

Spark Resources

Architecture Overview & Use Cases		Added By Paul Russel	
Spark By Examples (Tutorial Documentation)			
PySpark Syntax Cheat Sheet			

Courses

The Coding Interview Bootcamp: Algorithms + Data Structures			
Data Warehouse Concepts: Basic to Advanced concepts			
Data Structures and Algorithms Bootcamp			
Data Structures and Algorithms - The Complete Masterclass			

Books

Cracking The Code			
The Algorithm Design Manual			
The Data Warehouse Toolkit: The Definitive Guide to Dimensional Modeling, 3rd Edition			

Other Resources			
[What I Learned From 100+ Data Engineering Interviews - Interview Tips](#)			
[How To Start Your Next Data Engineering Project](#)			
[Data Engineering Roadmap For 2022](#)			