SQL Essentials: Key Topics  
  
1. JOINs - Master INNER, LEFT, RIGHT, FULL joins for effective tabl combinations.  
2. Aggregations - Use COUNT, SUM, AVG, MIN, MAX for data insights.  
3. Subqueries vs Joins - Know when to simplify with subqueries.  
4. Indexes - Speed up data retrieval and optimize queries.  
5. Normalization - Design efficient database structures.  
6. CTEs - Make complex queries more readable.  
7. Transaction Control - Ensure data integrity with ACID properties.  
  
Don't Forget To Save For Later!  
  
SQL is a must-have skill for any job seeker. These courses will help you learn SQL and ace your interviews.  
  
  
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1 Introduction Generative to Al  
🔗 <https://lnkd.in/detitq8h>  
2. Generative AI with Large Language Models  
🔗 <https://lnkd.in/dKkYeknp>  
3. Generative Adversarial Networks (GANs) Specialization  
🔗 <https://lnkd.in/dyXgBExM>  
4. Introduction to Artificial Intelligence (AI)  
🔗 <https://lnkd.in/d2Awst5W>  
5. Generative AI Primer  
🔗 <https://lnkd.in/d5Mxw9m3>  
6. Natural Language Processing Specialization  
🔗 <https://lnkd.in/dwHpf5St>  
7. Deep Learning Specialization  
🔗 <https://lnkd.in/d6cWvJ_9>  
8. Generative AI for Data Scientists Specialization  
🔗 <https://lnkd.in/d-MCw8k5>  
9. IBM Data Science Professional Certificate  
🔗 <https://lnkd.in/d2cBszG5>  
10. Introduction to Data Science  
🔗 <https://lnkd.in/dKGf-KtB>  
11. Learn SQL Basics for Data Science  
🔗 <https://lnkd.in/dCpZ-NRX>  
12. Python for Everybody  
🔗 <https://lnkd.in/dicyAtC4>  
13. Machine Learning Specialization  
🔗 <https://lnkd.in/dW7wUUcx>  
14. Data Science Fundamentals with Python & SQL Specialization  
🔗 <https://lnkd.in/dkfRpT9e>  
15. Excel Skills for Data Analytics and Visualization  
🔗 <https://lnkd.in/dgvEw2e5>  
16. Crash Course on Python  
🔗 <https://lnkd.in/dsCQJQpk>  
17. IBM Data Analytics with Excel and R  
🔗<https://lnkd.in/duHEEBRR>  
18. Excel to MySQL: Analytic Techniques for Business  
🔗 <https://lnkd.in/dfpewZ-b>  
19. Advanced Google Analytics  
🔗<https://lnkd.in/d-n-za6p>  
20. Google Project Management  
🔗<https://lnkd.in/dtTiGX8N>  
21. Agile Project Management  
🔗<https://lnkd.in/d_Zk7zdi>  
22. Project Execution: Running the Project  
🔗<https://lnkd.in/d69b7erj>  
23. Foundations of Project Management  
🔗<https://lnkd.in/dy77uH67>  
24. Project Initiation: Starting a Successful Project  
🔗<https://lnkd.in/dsZFaNmi>  
25. Project Planning: Putting It All Together  
🔗<https://lnkd.in/d5zrVak6>  
26. Google Data Analytics:  
🔗 <https://lnkd.in/dVAzUSJd>  
27. Get Started with Python  
🔗 <https://lnkd.in/diX9mRw6>  
28. Learn Python Basics for Data Analysis  
🔗<https://lnkd.in/dimjFgx5> <https://lnkd.in/dz2AZZB8>  
29. Google Advanced Data Analytics Capstone  
🔗 <https://lnkd.in/dcVTcbih>  
30. Data Analysis with R Programming  
🔗 <https://lnkd.in/dwpP4xT3>

Don't Confuse to learn PySpark.  
  
Learn This Concept to be proficient in PySpark.  
  
𝗕𝗮𝘀𝗶𝗰𝘀 𝗼𝗳 𝗣𝘆𝗦𝗽𝗮𝗿𝗸:  
- PySpark Architecture  
- SparkContext and SparkSession  
- RDDs (Resilient Distributed Datasets)  
- DataFrames  
- Transformations and Actions  
- Lazy Evaluation  
  
𝗣𝘆𝗦𝗽𝗮𝗿𝗸 𝗗𝗮𝘁𝗮𝗙𝗿𝗮𝗺𝗲𝘀:  
- Creating DataFrames  
- Reading Data from CSV, JSON, Parquet  
- DataFrame Operations  
- Filtering, Selecting, and Aggregating Data  
- Joins and Merging DataFrames  
- Working with Null Values  
  
𝗣𝘆𝗦𝗽𝗮𝗿𝗸 𝗖𝗼𝗹𝘂𝗺𝗻 𝗢𝗽𝗲𝗿𝗮𝘁𝗶𝗼𝗻𝘀:  
- Defining and Using UDFs (User Defined Functions)  
- Column Operations (Select, Rename, Drop)  
- Handling Complex Data Types (Array, Map)  
- Working with Dates and Timestamps  
  
𝗣𝗮𝗿𝘁𝗶𝘁𝗶𝗼𝗻𝗶𝗻𝗴 𝗮𝗻𝗱 𝗦𝗵𝘂𝗳𝗳𝗹𝗲 𝗢𝗽𝗲𝗿𝗮𝘁𝗶𝗼𝗻𝘀:  
- Understanding Partitions  
- Repartitioning and Coalescing  
- Managing Shuffle Operations  
- Optimizing Partition Sizes for Performance  
  
𝗖𝗮𝗰𝗵𝗶𝗻𝗴 𝗮𝗻𝗱 𝗣𝗲𝗿𝘀𝗶𝘀𝘁𝗶𝗻𝗴 𝗗𝗮𝘁𝗮:  
- When to Cache or Persist  
- Memory vs Disk Caching  
- Checking Storage Levels  
  
𝗣𝘆𝗦𝗽𝗮𝗿𝗸 𝗪𝗶𝘁𝗵 𝗦𝗤𝗟:  
- Spark SQL Introduction  
- Creating Temp Views  
- Running SQL Queries  
- Optimizing SQL Queries with Catalyst Optimizer  
- Working with Hive Tables in PySpark  
  
𝗪𝗼𝗿𝗸𝗶𝗻𝗴 𝘄𝗶𝘁𝗵 𝗗𝗮𝘁𝗮 𝗶𝗻 𝗣𝘆𝗦𝗽𝗮𝗿𝗸:  
- Data Cleaning and Preparation  
- Handling Missing Values  
- Data Normalization and Transformation  
- Working with Categorical Data  
  
𝗔𝗱𝘃𝗮𝗻𝗰𝗲𝗱 𝗧𝗼𝗽𝗶𝗰𝘀 𝗶𝗻 𝗣𝘆𝗦𝗽𝗮𝗿𝗸:  
- Broadcasting Variables  
- Accumulators  
- PySpark Window Functions  
- PySpark with Machine Learning (MLlib)  
- Working with Streaming Data (Spark Streaming)  
  
𝗣𝗲𝗿𝗳𝗼𝗿𝗺𝗮𝗻𝗰𝗲 𝗧𝘂𝗻𝗶𝗻𝗴 𝗶𝗻 𝗣𝘆𝗦𝗽𝗮𝗿𝗸:  
- Understanding Job, Stage, and Task  
- Tungsten Execution Engine  
- Memory Management and Garbage Collection  
- Tuning Parallelism  
- Using Spark UI for Performance Monitoring  
  
FYI, Just wanted to tell you guys, I recently came across this very interesting challenge.  
  
These days, many platforms charge lakhs of rupees for courses, but [GeeksforGeeks](https://www.linkedin.com/company/geeksforgeeks/) is doing something truly unique.  
  
With their Three90 Challenge, 𝘆𝗼𝘂 𝗴𝗲𝘁 𝟵𝟬% 𝗼𝗳 𝘆𝗼𝘂𝗿 𝗰𝗼𝘂𝗿𝘀𝗲 𝗳𝗲𝗲 𝗯𝗮𝗰𝗸 𝗶𝗳 𝘆𝗼𝘂 𝗰𝗼𝗺𝗽𝗹𝗲𝘁𝗲 𝗮𝘁 𝗹𝗲𝗮𝘀𝘁 𝟵𝟬% 𝗼𝗳 𝘁𝗵𝗲 𝗰𝗼𝘂𝗿𝘀𝗲 𝗶𝗻 𝟵𝟬 𝗱𝗮𝘆𝘀.  
  
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1. Purchase any course you like.  
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3. Get 90% of your course fee back as a reward.  
  
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