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| Database | |
| **SOURCE: 01** | **Database Management System (GATE EXAM)** |
| 01 | [DBMS Syllabus](https://www.youtube.com/watch?v=kBdlM6hNDAE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=1&pp=iAQB) |
| 02 | [Introduction to DBMS (Database Management system) with Real Life Example](https://www.youtube.com/watch?v=3EJlovevfcA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=2&pp=iAQB) |
| 03 | [File System vs DBMS | Disadvantages of File System | DBMS Advantage](https://www.youtube.com/watch?v=ZtVw2iuFI2w&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=3&pp=iAQB) |
| 04 | [Tier and 3 Tire Architecture with Real Life Examples](https://www.youtube.com/watch?v=VyvTabQHevw&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=4&pp=iAQB) |
| 05 | [What is Schema | How to Define Schema](https://www.youtube.com/watch?v=pDX4NR4eY3A&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=5&pp=iAQB) |
| 06 | [Three Schema Architecture | Three Level of Abstraction](https://www.youtube.com/watch?v=5fs1ldO6B5c&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=6&pp=iAQB) |
| 07 | [What is Data Independence | logical vs Physical Independency](https://www.youtube.com/watch?v=upUSGUSK5k0&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=7&pp=iAQB) |
| 08 | [Integrity Constraints in Database with Examples](https://www.youtube.com/watch?v=YTJdBA9wZro&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=8&pp=iAQB) |
| 09 | [What is CANDIDATE KEY and PRIMARY Key | Full Concept | Most Suitable Example](https://www.youtube.com/watch?v=mMxjKFiIKxs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=9&pp=iAQB) |
| 10 | [What is Primary Key in DBMS | Primary Key with Examples](https://www.youtube.com/watch?v=Tp37HXfekNo&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=10&pp=iAQB) |
| 11 | [Foreign Key in DBMS | Full Concept with Examples](https://www.youtube.com/watch?v=UyqpQ3D2yCw&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=11&pp=iAQB) |
| 12 | [Insert, Update and Delete from Foreign Key Table | Referential Integrity](https://www.youtube.com/watch?v=DM2lAomoDrg&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=12&pp=iAQB) |
| 13 | [Question on Foreign Key](https://www.youtube.com/watch?v=KknAgz0xGSU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=13&pp=iAQB) |
| 14 | [Super Key in DBMS](https://www.youtube.com/watch?v=QQqGfScdlzA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=14&pp=iAQB) |
| 15 | [Introduction to ER Model](https://www.youtube.com/watch?v=gbVev8RuZLg&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=15&pp=iAQB) |
| 16 | [Types of Attributes in ER Model | Full Concept](https://www.youtube.com/watch?v=WEo3g6Ir-vA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=16&pp=iAQB) |
| 17 | [One to One Relationship in DBMS](https://www.youtube.com/watch?v=s6MH7f3SnsY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=17&pp=iAQB) |
| 18 | [One to Many Relationship in DBMS | 1-M Relationship](https://www.youtube.com/watch?v=rZxETdO_KUQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=18&pp=iAQB) |
| 19 | [Many to Many Relationship in DBMS | M-N Relationship](https://www.youtube.com/watch?v=onR_sLhbZ4w&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=19&pp=iAQB) |
| 20 | [Question on Minimize Table in ER Mode](https://www.youtube.com/watch?v=Nxdq8RZ7Ayg&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=20&pp=iAQB) |
| 21 | [Introduction to Normalization | Insertion, Deletion, Updating Anomaly](https://www.youtube.com/watch?v=5GDTIUVlHB8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=21&pp=iAQB) |
| 22 | [First Normal form in DBMS | 1st Normal form](https://www.youtube.com/watch?v=NlgZy30Dv9A&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=22&pp=iAQB) |
| 23 | [Finding Closure of Functional Dependency in DBMS | Easiest and Simplest Way](https://www.youtube.com/watch?v=bSdvM_0hzgc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=23&pp=iAQB) |
| 24 | [Functional Dependency and Its Properties in DBMS](https://www.youtube.com/watch?v=qn5neFBpU40&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=24&pp=iAQB) |
| 25 | [Second Normal Form | 2NF](https://www.youtube.com/watch?v=tkbAA--wKOc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=25&pp=iAQB) |
| 26 | [Third Normal Form in DBMS with Examples | Normalization](https://www.youtube.com/watch?v=IeSai2JVm78&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=26&pp=iAQB) |
| 27 | [Boyce Codd Normal Form | BCNF | DBMS | Normalization with Best Examples](https://www.youtube.com/watch?v=mf_PbWPo7VM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=27&pp=iAQB) |
| 28 | [BCNF Always Ensures Dependency Preserving Decomposition and Normalization Examples](https://www.youtube.com/watch?v=qwI0oe3-g9g&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=28&pp=iAQB) |
| 29 | [Lossless and Lossy Decomposition | Fifth Normal Form](https://www.youtube.com/watch?v=Sabwow_e2-M&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=29&pp=iAQB) |
| 30 | [All Normal Forms with Real Life Examples | 1NF 2NF 3NF BCNF 4NF 5NF All in One](https://www.youtube.com/watch?v=EGEwkad_llA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=30&pp=iAQB) |
| 31 | [Minimal Cover in DBMS with Cample | Canonical Cover](https://www.youtube.com/watch?v=sS-LJMTVVj8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=31&pp=iAQB) |
| 32 | [Question on Normalization](https://www.youtube.com/watch?v=4h8VoRnRvnE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=32&pp=iAQB) |
| 33 | [How to Find Our the Normal Form Out The Normal Form of A Relation](https://www.youtube.com/watch?v=wTJjpH2RUcQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=33&pp=iAQB) |
| 34 | [Cover and Equivalence of Functional Dependencies](https://www.youtube.com/watch?v=eIXC6NfKno4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=36&pp=iAQB) |
| 35 | [Dependency Preserving Decomposition with Example 1](https://www.youtube.com/watch?v=0oeap0QDslY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=37&pp=iAQB) |
| 36 | [Dependency Preserving Decomposition with Example 2](https://www.youtube.com/watch?v=jxENwUU9j7w&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=38&pp=iAQB) |
| 37 | [Introduction to Joins and Its Types | Need of Joins with Examples](https://www.youtube.com/watch?v=zYH-e6tUYbw&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=39&pp=iAQB) |
| 38 | [Natural Join Operation with Example](https://www.youtube.com/watch?v=jRxEjmjIIFs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=40&pp=iAQB) |
| 39 | [Self-Join Operation with Example](https://www.youtube.com/watch?v=6DQpvfdj6EE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=41&pp=iAQB) |
| 40 | [Equal Join Operation with Example](https://www.youtube.com/watch?v=lUiPjkOQG9w&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=42&pp=iAQB) |
| 41 | [Left Outer Join Operation with Example](https://www.youtube.com/watch?v=unxn0KnzBzk&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=43&pp=iAQB) |
| 42 | [Right Outer Join Operation with Example](https://www.youtube.com/watch?v=t7J__TGqoQs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=44&pp=iAQB) |
| 43 | [Introduction to Relational Algebra](https://www.youtube.com/watch?v=4YilEjkNPrQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=45&pp=iAQB) |
| 44 | [Projection in Relational Algebra](https://www.youtube.com/watch?v=G9ixeTIyg8s&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=46&pp=iAQB) |
| 45 | [Selection in Relational Algebra](https://www.youtube.com/watch?v=2hUVf17DHVs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=47&pp=iAQB) |
| 46 | [Cross/Cartesian Product in Relational Algebra](https://www.youtube.com/watch?v=F6MBz_h3Uj8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=48&pp=iAQB) |
| 47 | [Set Difference in Relational Algebra](https://www.youtube.com/watch?v=evDqDiJpw5k&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=49&pp=iAQB) |
| 48 | [Union Operation in Relational Algebra](https://www.youtube.com/watch?v=b0zitqncxP8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=50&pp=iAQB) |
| 49 | [Division Operation in Relational Algebra](https://www.youtube.com/watch?v=lbvCaETL2FI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=51&pp=iAQB) |
| 50 | [Tuple Calculus in DBMS with Examples](https://www.youtube.com/watch?v=SnsrohgiPo0&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=52&pp=iAQB) |
| 51 | [Introduction to Structured Query Language | All Points Regarding its Features](https://www.youtube.com/watch?v=323H_mOOWQ4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=53&pp=iAQB) |
| 52 | [All Types of SQL Commands with Example | DDL, DML, DCL, TCL and CONSTRAINTS](https://www.youtube.com/watch?v=vUj-kUEC_oA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=54&pp=iAQB) |
| 53 | [Create Table in SQL with Execution | SQL for Beginners | Oracle LIVE](https://www.youtube.com/watch?v=R6Ps7aUNPE4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=55&pp=iAQB) |
| 54 | [ALTER Command (DDL) in SQL with Implementation on Oracle](https://www.youtube.com/watch?v=NA3b8JRUmww&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=56&pp=iAQB) |
| 55 | [Difference Between ALTER and UPDATE in SQL with Examples](https://www.youtube.com/watch?v=x56CHpL4GBE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=57&pp=iAQB) |
| 56 | [Difference Between Delete, Drop and Truncate in SQL](https://www.youtube.com/watch?v=_m1aJdD-oD8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=58&pp=iAQB) |
| 57 | [Constraints in SQL](https://www.youtube.com/watch?v=PcMr6xoundk&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=59&pp=iAQB) |
| 58 | [SQL Queries and Subqueries (Part-1)](https://www.youtube.com/watch?v=_yog7h4BokQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=60&pp=iAQB) |
| 59 | [SQL Queries and Subqueries (Part-2) | 2nd Highest Salary | Nested Query](https://www.youtube.com/watch?v=9lLpe_detTY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=61&pp=iAQB) |
| 60 | [SQL Queries and Subqueries (Part-3) | Group By Clause](https://www.youtube.com/watch?v=apNmMWgFFRg&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=62&pp=iAQB) |
| 61 | [SQL Queries and Subqueries (Part-4) | Having Clause](https://www.youtube.com/watch?v=iPEmGpI3OGU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=63&pp=iAQB) |
| 62 | [SQL Queries and Subqueries (Part-5)](https://www.youtube.com/watch?v=4uOwq0ASCtc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=64&pp=iAQB) |
| 63 | [SQL Queries and Subqueries (Part-6) | Use of IN and NOT IN](https://www.youtube.com/watch?v=jEqi2tpI4eE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=65&pp=iAQB) |
| 64 | [SQL Queries and Subqueries (Part-7) | Use of IN and NOT IN in Subquery](https://www.youtube.com/watch?v=JNCHZlRqZUU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=66&pp=iAQB) |
| 65 | [EXIST and NOT EXIST Subqueries (Part-8)](https://www.youtube.com/watch?v=wA9GJZcB618&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=67&pp=iAQB) |
| 66 | [SQL Aggregate Functions – SUM, AVG(n), COUNT, MIN, MAX Functions](https://www.youtube.com/watch?v=Yr4pHPZCshA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=68&pp=iAQB) |
| 67 | [Correlated Subquery in SQL with Example](https://www.youtube.com/watch?v=0d419Vo2Po4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=69&pp=iAQB) |
| 68 | [Difference Between Joins, Nested Subquery and Correlated Subquery](https://www.youtube.com/watch?v=bonJEipf3VU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=70&pp=iAQB) |
| 69 | [Find Nth (1st, 2nd, 3rd, ….N) Highest Salary in SQL](https://www.youtube.com/watch?v=fh4yBn0oTaM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=71&pp=iAQB) |
| 70 | [Question on SQL Basic Concepts](https://www.youtube.com/watch?v=BKQcn0sLZGM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=72&pp=iAQB) |
| 71 | [Introduction to PL-SQL in DBMS](https://www.youtube.com/watch?v=iyJxCc9XRxU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=73&pp=iAQB) |
| 72 | [Introduction to Transaction Concurrency](https://www.youtube.com/watch?v=t5hsV9lC1rU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=74&pp=iAQB) |
| 73 | [ACID Properties of a Transaction](https://www.youtube.com/watch?v=-GS0OxFJsYQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=75&pp=iAQB) |
| 74 | [Transaction States](https://www.youtube.com/watch?v=ObwYFVLB_VI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=76&pp=iAQB) |
| 75 | [What is Schedule | Serial vs Parallel Schedule](https://www.youtube.com/watch?v=1cbmhsSJRWc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=77&pp=iAQB) |
| 76 | [All Concurrency Problems | Dirty Read | Incorrect Summary | Lost Update | Phantom Read](https://www.youtube.com/watch?v=oP8yLMjmszE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=78&pp=iAQB) |
| 77 | [Write-Read Conflict or Dirty Read Problem](https://www.youtube.com/watch?v=r_oI0jLqlVY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=79&pp=iAQB) |
| 78 | [Read-Write Conflict or Unrepeatable Read Problem](https://www.youtube.com/watch?v=vwIeKYGXmjI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=80&pp=iAQB) |
| 79 | [Irrecoverable vs Recoverable Schedules in Transactions](https://www.youtube.com/watch?v=g2gZKA8E1yA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=81&pp=iAQB) |
| 80 | [Cascading vs Cascade-less Schedule with Example | Recoverability](https://www.youtube.com/watch?v=Fxt1pk5LEBU&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=82&pp=iAQB) |
| 81 | [Introduction to Serializability | Transactions Concurrency and Control](https://www.youtube.com/watch?v=s8QlJoL1G6w&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=83&pp=iAQB) |
| 82 | [Conflict Equivalent Schedules with Example | Transaction Concurrency and Control](https://www.youtube.com/watch?v=ckqDozxECp0&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=84&pp=iAQB) |
| 83 | [Conflict Serializability | Precedence Graph | Transaction](https://www.youtube.com/watch?v=zv0ba0Iok1Y&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=85&pp=iAQB) |
| 84 | [Why View Serializability is Used | Introduction to View Serializability](https://www.youtube.com/watch?v=8LKM_RWeroM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=86&pp=iAQB) |
| 85 | [Shared Exclusive Locking Protocol with Example | Concurrency Control Part-1](https://www.youtube.com/watch?v=94C0V7f2zm4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=87&pp=iAQB) |
| 86 | [Drawback in Shared/Exclusive Locking Protocol with Example | Concurrency Control Part-2](https://www.youtube.com/watch?v=UsqtDD1VriY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=88&pp=iAQB) |
| 87 | [Phase Locking (2PL) Protocol in Transaction Concurrency Control](https://www.youtube.com/watch?v=1pUaEDNLWi4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=89&pp=iAQB) |
| 88 | [Drawbacks in 2 Phase Locking (2PL) Protocol with Example | Concurrency Control](https://www.youtube.com/watch?v=pZExswIjVsk&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=90&pp=iAQB) |
| 89 | [Strict 2PL, Rigorous 2PL and Conservative 2PL Schedule | 2 Phase Locking in DBMS](https://www.youtube.com/watch?v=z8Yqn91akV8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=91&pp=iAQB) |
| 90 | [Basic Timestamp Ordering Protocol with Example | Concurrency Control](https://www.youtube.com/watch?v=27NtGV1vNoY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=92&pp=iAQB) |
| 91 | [How to Solve Question on Timestamp Ordering Protocol | Concurrency Control](https://www.youtube.com/watch?v=h60vaqrXHO8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=93&pp=iAQB) |
| 92 | [Why Indexing is Used | Indexing Beginning](https://www.youtube.com/watch?v=E--yzX05_k8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=94&pp=iAQB) |
| 93 | [Numerical Example on I/O Cost in Indexing Part-1](https://www.youtube.com/watch?v=P24LAhp-ap8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=95&pp=iAQB) |
| 94 | [Numerical Example on I/O Cost in Indexing Part-2](https://www.youtube.com/watch?v=s_S_MpLoDEM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=96&pp=iAQB) |
| 95 | [Types of Indexes | Most Important Video on Indexing](https://www.youtube.com/watch?v=vjrHiaIfOl8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=97&pp=iAQB) |
| 96 | [Primary Index with Example | GATE, PSU and UGC NET](https://www.youtube.com/watch?v=4E-MGnjMhRw&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=98&pp=iAQB) |
| 97 | [Clustered Index in Database with Example](https://www.youtube.com/watch?v=UpJ9ICmzaAM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=99&pp=iAQB) |
| 98 | [Secondary Index in Database with Example | Multilevel Indexing](https://www.youtube.com/watch?v=Ua08uVgsk4k&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=100&pp=iAQB) |
| 99 | [Introduction to B-Tree and Its Structure | Block Pointer, Record Pointer and Key](https://www.youtube.com/watch?v=KcApkM5WYGw&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=101&pp=iAQB) |
| 100 | [Insertion in B-Tree with Example](https://www.youtube.com/watch?v=YUtUNlLNB5c&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=102&pp=iAQB) |
| 101 | [How to Find Order of B-Tree](https://www.youtube.com/watch?v=yGSHbjA4w0o&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=103&pp=iAQB) |
| 102 | [Difference Between B-Tree and B+ Tree with Example](https://www.youtube.com/watch?v=BwUvgG29fPc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=104&pp=iAQB) |
| 103 | [Order of B+ Tree | Order of Leaf Node and Non-Leaf Node in B+ Tree](https://www.youtube.com/watch?v=V-ayKf1CWQE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=105&pp=iAQB) |
| 104 | [Immediate Database Modification in DBMS | Log Based Recovery Methods](https://www.youtube.com/watch?v=47LvbDGD4cc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=106&pp=iAQB) |
| 105 | [Deferred Database Modification in DBMS | Log Based Recovery Methods](https://www.youtube.com/watch?v=0YhOYqPeq0g&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=107&pp=iAQB) |
| 106 | [Like Command in SQL with Example | Learn SQL in Easiest Way](https://www.youtube.com/watch?v=iug2vvLQ9B8&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=108&pp=iAQB) |
| 107 | [Basic PL-SQL Programming with Execution Part-1](https://www.youtube.com/watch?v=2_1IgbDjqoQ&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=109&pp=iAQB) |
| 108 | [Basic PL-SQL Programming (While, For Loop) with Execution Part-2](https://www.youtube.com/watch?v=yFA_ZzMynv0&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=110&pp=iAQB) |
| 109 | [Single Row and Multi Row Function in SQL](https://www.youtube.com/watch?v=-uVzU8dX_-M&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=111&pp=iAQB) |
| 110 | [Character Function in SQL with Execution | Oracle LIVE](https://www.youtube.com/watch?v=NgTITZuT77Q&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=112&pp=iAQB) |
| 111 | [View in Database | Oracle, SQL Server Views | Type of Views](https://www.youtube.com/watch?v=QngqhdLd1SE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=113&pp=iAQB) |
| 112 | [How Aggregate Functions work on NULL Values](https://www.youtube.com/watch?v=pn9OI3sSKFE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=114&pp=iAQB) |
| 113 | [What is RAID | RAID 0, RAID 1, RAID 4, RAID 5, RAID 6, Nested RAID 10 Explained](https://www.youtube.com/watch?v=-6sA9nHlZDc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=115&pp=iAQB) |
| 114 | [Various Object in Database | Oracle, SQL Server](https://www.youtube.com/watch?v=dCRMG-qDaHM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=116&pp=iAQB) |
| 115 | [Question Explanation on ER Model](https://www.youtube.com/watch?v=ibRwG8Pm-vI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=117&pp=iAQB) |
| 116 | [Questions on DBMS Basic Concepts and Data Modelling](https://www.youtube.com/watch?v=PJK3OWg5Ji0&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=118&pp=iAQB) |
| 117 | [Question on Inner, Left, Right and Full Outer Joins Explanations](https://www.youtube.com/watch?v=Cu9-mNbXkww&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=119&pp=iAQB) |
| 118 | [Question on Advance DBMS | BIG Data and Data Warehouse](https://www.youtube.com/watch?v=skplnGHCbqY&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=120&pp=iAQB) |
| 119 | [Question on Normalization (Schemas) Explanation](https://www.youtube.com/watch?v=vYsVVM4TOLk&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=121&pp=iAQB) |
| 120 | [Question on Relational Algebra](https://www.youtube.com/watch?v=AIaGnc2E5xc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=122&pp=iAQB) |
| 121 | [Codd’s 12 Rules of RDBMS with Examples](https://www.youtube.com/watch?v=CNdKfDDwqQI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=123&pp=iAQB) |
| 122 | [CREATE Command (DDL) in SQL with Implementation on ORACLE](https://www.youtube.com/watch?v=Nsv0MX3IDJE&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=125&pp=iAQB) |
| 123 | [SEQUENCE in SQL with Syntax and Examples](https://www.youtube.com/watch?v=EDZMYBNj7wM&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=126&pp=iAQB) |
| 124 | [How SQL Query Executes | Order of SQL Query Execution](https://www.youtube.com/watch?v=wP2giPPgwqI&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=127&pp=iAQB) |
| 125 | [Introduction to Hadoop | What is Hadoop | Hadoop Framework](https://www.youtube.com/watch?v=g_x4D2V1MP4&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=128&pp=iAQB) |
| 126 | [Introduction o BIG Data | Small Data vs BIG Data | Real Life Example](https://www.youtube.com/watch?v=LOuAOZWJ9RA&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=129&pp=iAQB) |
| 127 | [Simple vs Complex vs Materialized Views with Examples](https://www.youtube.com/watch?v=XI1rk1Uaf7U&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=130&pp=iAQB) |
| 128 | [Foreign Key with On Delete Cascade with Execution](https://www.youtube.com/watch?v=Br2FInlVKcs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=131&pp=iAQB) |
| 129 | [Procedures in PL-SQL | Local Procedure vs Stored Procedure](https://www.youtube.com/watch?v=v-XBdh7Xupc&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=132&pp=iAQB) |
| 130 | [How to Fetch Data From Database Using Procedures | PL-SQL Procedure](https://www.youtube.com/watch?v=ba0gZ2RYLfs&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=133&pp=iAQB) |
| 131 | [%TYPE and %ROWTYPE in PL-SQL with Examples](https://www.youtube.com/watch?v=Et7qpdC7Iag&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=134&pp=iAQB) |
| 132 | [What is Cursor in PL-SQL with Example](https://www.youtube.com/watch?v=2ege5FiH6Go&list=PLxCzCOWd7aiFAN6I8CuViBuCdJgiOkT2Y&index=135&pp=iAQB) |
| **SOURCE: 02** | **Database Design** |
| 01 | [Introduction](https://www.youtube.com/watch?v=e7Pr1VgPK4w&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=2&pp=iAQB) |
| 02 | [What is a Database](https://www.youtube.com/watch?v=hG_3UHepr_M&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=3&pp=iAQB) |
| 03 | [What is a Relational Database](https://www.youtube.com/watch?v=zhu6jtlghIs&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=4&pp=iAQB) |
| 04 | [RDBMS](https://www.youtube.com/watch?v=X-81V5jNrYM&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=5&pp=iAQB) |
| 05 | [Introduction to SQL](https://www.youtube.com/watch?v=Aw6DwXK0ZGM&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=6&pp=iAQB) |
| 06 | [Naming Conventions](https://www.youtube.com/watch?v=Rtw3YOYDt3A&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=7&pp=iAQB) |
| 07 | [What is Database Design](https://www.youtube.com/watch?v=nSzuHnkcfo8&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=8&pp=iAQB) |
| 08 | [Data Integrity](https://www.youtube.com/watch?v=1D_h-yFtQVo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=9&pp=iAQB) |
| 09 | [Database Terms](https://www.youtube.com/watch?v=pShj3gtYQik&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=10&pp=iAQB) |
| 10 | [More Database Terms](https://www.youtube.com/watch?v=3-qSONSuZq0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=11&pp=iAQB) |
| 11 | [Atomic Values](https://www.youtube.com/watch?v=Uhy75wsS96s&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=12&pp=iAQB) |
| 12 | [Relationships](https://www.youtube.com/watch?v=2ko_rBZXTjE&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=13&pp=iAQB) |
| 13 | [One-to-One Relationships](https://www.youtube.com/watch?v=jKfZiotyRhk&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=14&pp=iAQB) |
| 14 | [One-to-Many Relationships](https://www.youtube.com/watch?v=fCUrCNiA0j0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=15&pp=iAQB) |
| 15 | [Many-to-Many Relationships](https://www.youtube.com/watch?v=pv7P9R9JI-E&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=16&pp=iAQB) |
| 16 | [Designing One-to-One Relationships](https://www.youtube.com/watch?v=M-Rw21NGORo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=17&pp=iAQB) |
| 17 | [Designing One-to-Many Relationships](https://www.youtube.com/watch?v=DzchNE1pbrk&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=18&pp=iAQB) |
| 18 | [Parent Tables and Child Tables](https://www.youtube.com/watch?v=ZtK89kVLPzM&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=19&pp=iAQB) |
| 19 | [Designing Many-to-Many Relationships](https://www.youtube.com/watch?v=GJbtDTGmOGY&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=20&pp=iAQB) |
| 20 | [Summary of Relationships](https://www.youtube.com/watch?v=o2aAU6wQZSw&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=21&pp=iAQB) |
| 21 | [Introduction to Keys](https://www.youtube.com/watch?v=AAREmlb4sTs&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=22&pp=iAQB) |
| 22 | [Primary Key Index](https://www.youtube.com/watch?v=AI4ifO-6-mo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=23&pp=iAQB) |
| 23 | [Look Up Table](https://www.youtube.com/watch?v=sCCBJBb4HQA&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=24&pp=iAQB) |
| 24 | [Super-key and Candidate Key](https://www.youtube.com/watch?v=kAXP8a1zuHo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=25&pp=iAQB) |
| 25 | [Primary-Key and Alternate-Key](https://www.youtube.com/watch?v=u77YwdnleS0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=26&pp=iAQB) |
| 26 | [Surrogate-Key and Natural-Key](https://www.youtube.com/watch?v=GCA63syHvsk&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=27&pp=iAQB) |
| 27 | [Should I Use Surrogate-Keys or Natural-Keys](https://www.youtube.com/watch?v=wcuqwXUF-gY&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=28&pp=iAQB) |
| 28 | [Foreign-Key](https://www.youtube.com/watch?v=qvxpTUc4nX0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=29&pp=iAQB) |
| 29 | [NOT NULL Foreign-Key](https://www.youtube.com/watch?v=tANmR6BJSDg&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=30&pp=iAQB) |
| 30 | [Foreign-Key Constraints](https://www.youtube.com/watch?v=rOyZtFo4qaU&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=31&pp=iAQB) |
| 31 | [Simple-Key, Composite-Key, Compound-Key](https://www.youtube.com/watch?v=vsGDtnBCwgg&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=32&pp=iAQB) |
| 32 | [Review and Key Points | Key Points](https://www.youtube.com/watch?v=kDguqVQydco&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=33&pp=iAQB) |
| 33 | [Introduction to Entity Relationship Modeling](https://www.youtube.com/watch?v=vmFFEok91GU&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=34&pp=iAQB) |
| 34 | [Cardinality](https://www.youtube.com/watch?v=alc5OWoLDkY&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=35&pp=iAQB) |
| 35 | [Modality](https://www.youtube.com/watch?v=_JwVlbzOaP0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=36&pp=iAQB) |
| 36 | [Introduction to Database Normalization](https://www.youtube.com/watch?v=RZ9lvPRxwpg&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=37&pp=iAQB) |
| 37 | [1NF](https://www.youtube.com/watch?v=JjwEhK4QxRo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=38&pp=iAQB) |
| 38 | [2NF](https://www.youtube.com/watch?v=WSKuxoAN35g&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=39&pp=iAQB) |
| 39 | [3NF](https://www.youtube.com/watch?v=6A41gVJ3g2g&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=40&pp=iAQB) |
| 40 | [Indexes (Clustered, Non-clustered, Composite Index)](https://www.youtube.com/watch?v=EZ3jBam2IEA&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=41&pp=iAQB) |
| 41 | [Data Types](https://www.youtube.com/watch?v=4OlN9oianT4&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=42&pp=iAQB) |
| 42 | [Introduction to Joins](https://www.youtube.com/watch?v=agC06TR_MJU&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=43&pp=iAQB) |
| 43 | [Inner-Join](https://www.youtube.com/watch?v=2lrNZdY3fE4&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=44&pp=iAQB) |
| 44 | [Inner-Join on 3 Tables](https://www.youtube.com/watch?v=TMBgvCMvSiI&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=45&pp=iAQB) |
| 45 | [Inner-Join on 3 Tables (Example)](https://www.youtube.com/watch?v=B47Idwxi3jI&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=46&pp=iAQB) |
| 46 | [Introduction to Outer-Joins](https://www.youtube.com/watch?v=vPnajSbemUM&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=47&pp=iAQB) |
| 47 | [Right Outer-Join](https://www.youtube.com/watch?v=NHexrFjeO6o&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=48&pp=iAQB) |
| 48 | [JOIN with NOT NULL Columns](https://www.youtube.com/watch?v=6n_zA2Nd9vo&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=49&pp=iAQB) |
| 49 | [Outer Join-Across 3 Tables](https://www.youtube.com/watch?v=EqSI9_03qRM&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=50&pp=iAQB) |
| 50 | [Alias](https://www.youtube.com/watch?v=wlTRroeVkj0&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=51&pp=iAQB) |
| 51 | [Self-Join](https://www.youtube.com/watch?v=W0p8KP0o8g4&list=PL_c9BZzLwBRK0Pc28IdvPQizD2mJlgoID&index=52&pp=iAQB) |