# CypherCreed's

# **Learning Path**

# Introduction to Database Management System (DBMS)

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#### **Introduction:**

★ Why Database Management System (DBMS) is important!

#### **Motivation:**

- ★ Database Administrator A day in the life
- ★ How to choose the right type of database for your enterprise IDG Contributor Network
- ★ Choose the Right Database for Your Application Vivek Ratan
- ★ SQL vs. NoSQL Databases: What's the Difference?
- ★ A Guide to Database Technology
- ★ SQL Demystified: <u>A Brief Primer on Relational Databases</u>

### **Learning Path**

#### 01. Fundamentals

- **★ Basic Knowledge in Programming** (in C/C++/Java/Python)
- ★ Learn Data Structures >>>
  - Refer to CypherCreed's Data Structures & Algorithms Learning Roadmap!
- ★ Learn Database Management Systems (DBMS) >>>
  - In-depth theoritical concepts NPTEL (IIT KGP)
- ★ Learn SQL >>> (Choose any one)
  - The Complete SQL Bootcamp Jose Portilla
  - o The Ultimate MySQL Bootcamp: Go from SQL Beginner to Expert Colt Steele
  - o The Complete Oracle SQL Certification Course Imtiaz Ahmad

#### ★ Practice >>>

o For practicing MySQL - use W3Schools!

#### 02. Professional Certifications

- ★ Microsoft SQL Server Certifications >>> (following certifications are in progressive order!)
  - Microsoft Technology Associate (MTA)
    - Exam 98-364 : Database Fundamentals
  - MCSA: <u>SQL 2016 Database Administration</u> (If chosen!)(Pass the following exams)
    - Exam 70-764 : Administering a SQL Database Infrastructure
    - Exam 70-765: Provisioning SQL Databases
  - MCSA: <u>SQL 2016 Database Development</u> (If chosen!)(Pass the following exams)
    - Exam 70-761: Querying Data with Transact-SQL
    - Exam 70-762 : Developing SQL Databases
  - MCSA: <u>SQL 2016 BI Development</u> (If chosen!)(Pass the following exams)
    - Exam 70-767 : Implementing an SQL Data Warehouse
    - Exam 70-768 : Developing SQL Data Models
- **★** Oracle Database Certifications >>>
  - o Oracle Database SQL | 1Z0-071 (Entry Level)
  - o Oracle Database 11g (If chosen!)(Pass the following exams)
    - Oracle Database 11g: <u>Administration I</u>
    - Oracle Database 11g: Administration II
  - o Oracle Database 12c (If chosen!)(Pass the following exams)
    - Oracle Database 12c Administration
    - Oracle Database 12c: Advanced Administration
  - Oracle Database 12c R2 (If chosen!)(Pass the following exams)
    - Oracle Database 12cR2 Administration
    - Oracle Database 12cR2 Advanced Administration

# **Other Resources:**

Books: Being present in this modern digital world of unbound opportunities and resources, do you really need a HardCopy of a few pages (which considerably won't update w.r.t to time)? Think twice! Learn Digitally!

But if you still wanna read some books, then here it is! >>>

→ <u>Database System Concepts 6th edition</u> - Avi Silberschatz, Henry F. Korth, and S. Sudarshan

# **Happy Learning!**

