

# Basic SQL

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This contains the basic in SQL/Databases one should be familiar with for Software Developer/Data Analyst/Data Scientist role.

1. Need for Databases
2. DBMS/RDBMS
3. SQL
4. Types of Commands
  - (a) DDL
  - (b) DML
5. Create/Alter/Drop Database
6. Create/Alter/Drop Table
7. **Constraints**
  - (a) Primary Key
  - (b) Foreign Key
  - (c) Unique
  - (d) Check
  - (e) Not Null
  - (f) Default
8. **Queries**
  - (a) CREATE
  - (b) SELECT
  - (c) UPDATE
  - (d) DELETE
9. Joins and Types
  - (a) Inner Join
  - (b) Outer Join
    - i. Left Outer
    - ii. Right Outer
    - iii. Full Outer
  - (c) Self Join
  - (d) Cross Join
10. Normalization (Normal Forms)

- (a) 1NF
- (b) 2NF
- (c) 3NF
- (d) 4NF
- (e) 5NF
- (f) BCNF

11. Indexes and Types

- (a) Clustered
- (b) Non-Clustered
- (c) Unique

12. Cursor

13. Views

14. Triggers

15. Stored Procedure (SP)