

## 8. Query Language & SQL

→ SQL - is standard for querying relational databases due to its maturity, support and ease of use

### 9. Indexes

→ Data structures that improve query speed by allowing fast lookups but can slow down inserts/updates

## 10. Transactions & ACID properties

→ Transaction → A sequence of operations treated as a single unit

→ ACID - Atomicity, Consistency, Isolation, Durability → ensures reliable transactions

## 11. Data Engine

→ Core service for storing, processing and security data.

## 12. Data Modeling

→ the process of defining database structure

## 13. View in SQL

→ A virtual table based on SQL query

## 14. Stored Procedures & Triggers

→ Stored procedure → predefined SQL code for repetitive tasks

→ Trigger → Auto executed code (~ response to database events)

## 15. Batch vs Stream Processing