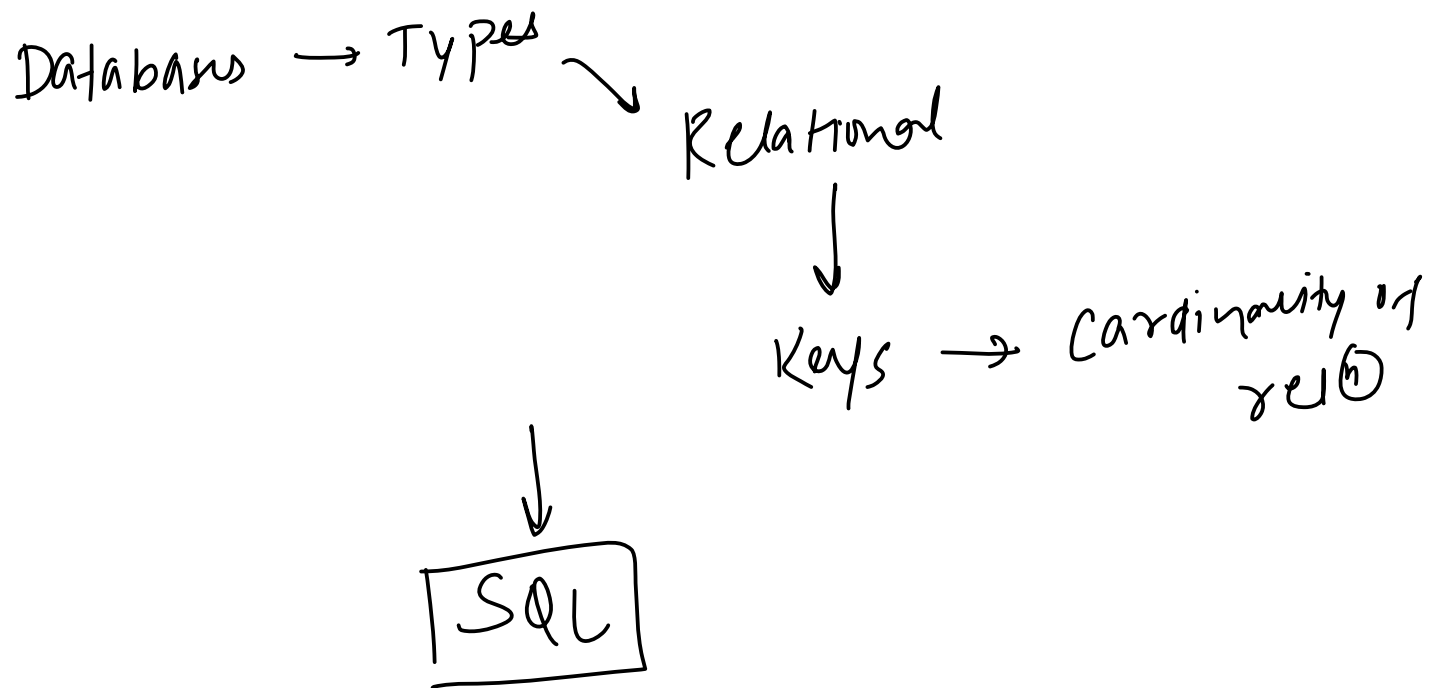


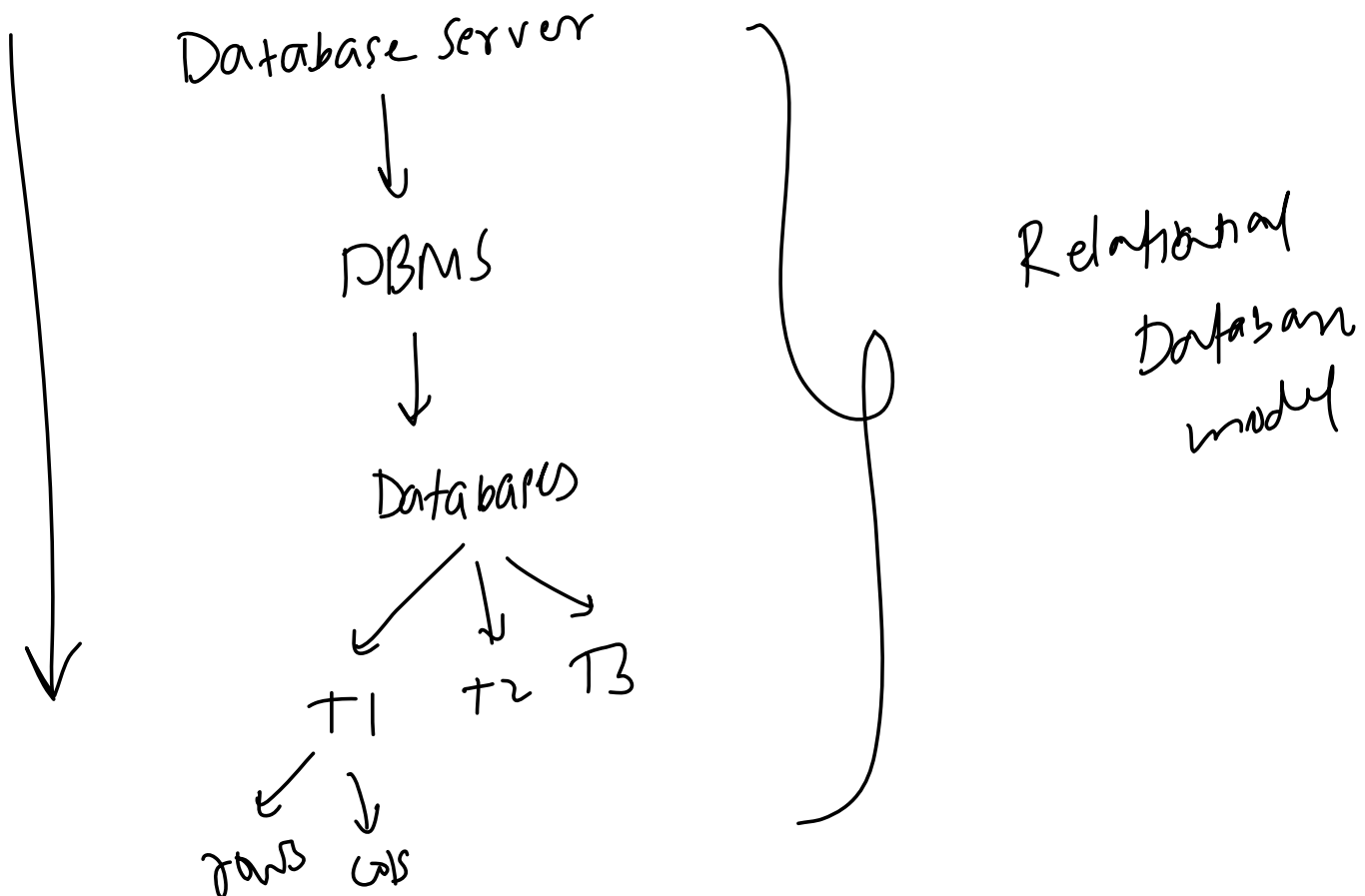
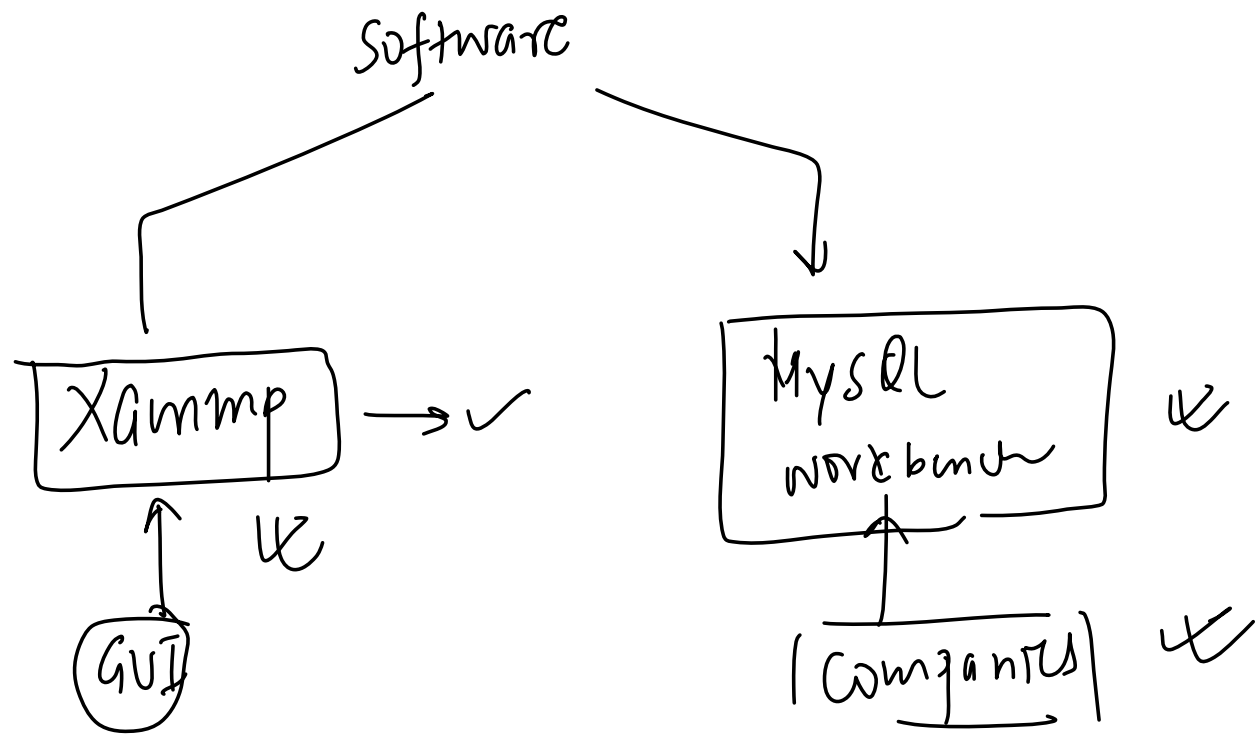
Till now?

08 February 2023 14:56



Installation

08 February 2023 16:05



What is SQL?

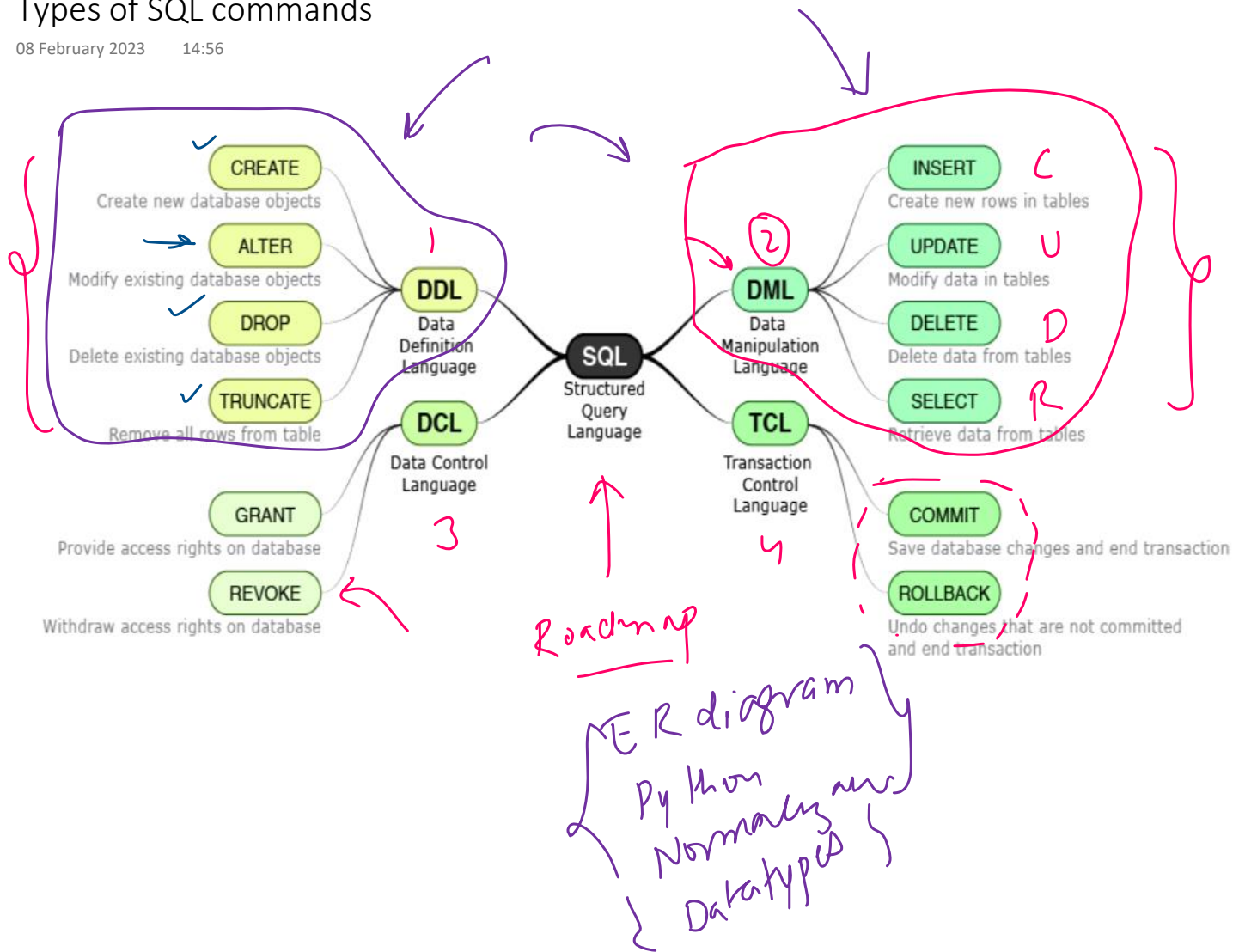
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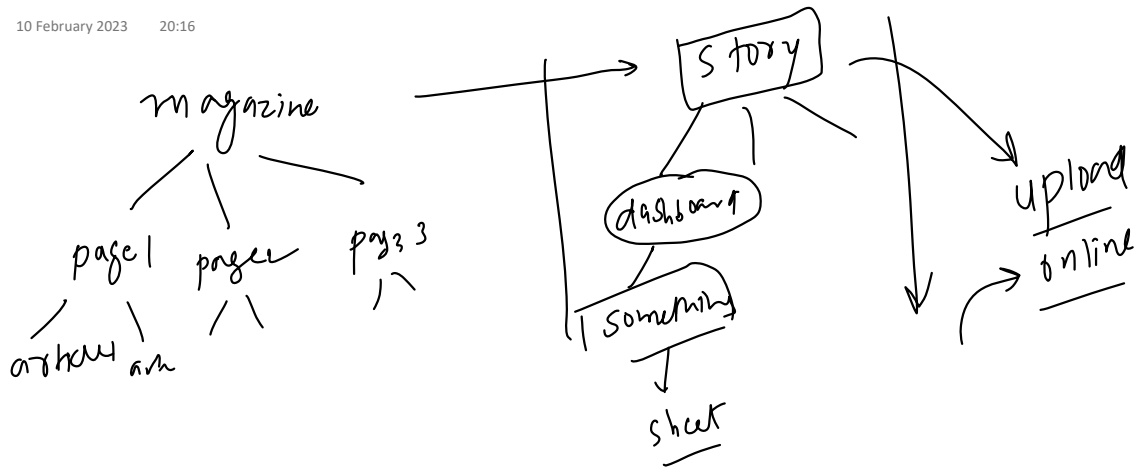
CRUD

SQL (Structured Query Language) is a programming language used for managing and manipulating data in relational databases. It allows you to insert, update, retrieve, and delete data in a database. It is widely used for data management in many applications, websites, and businesses. In simple terms, SQL is used to communicate with and control databases.

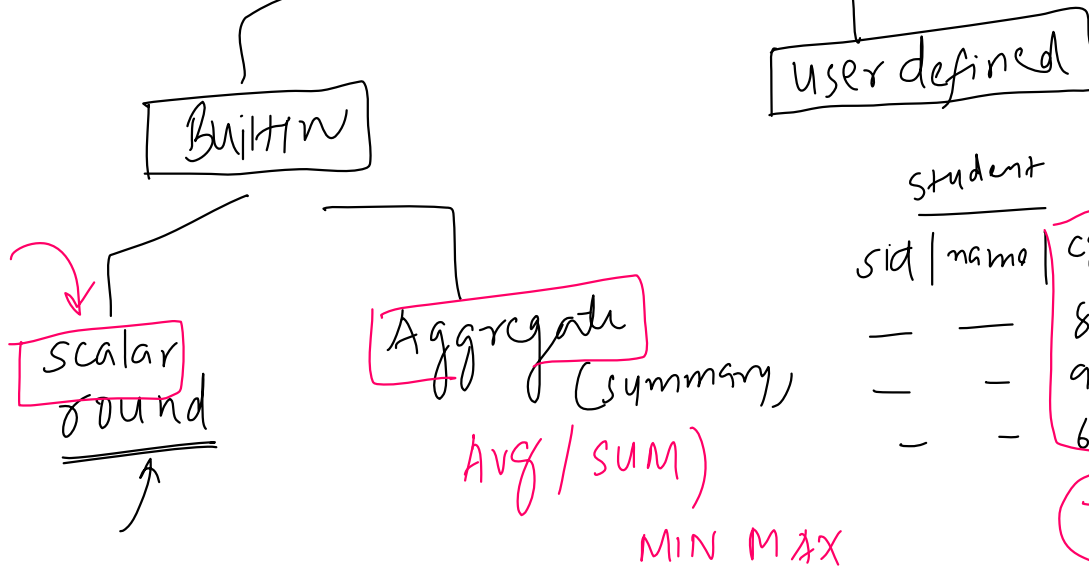
Types of SQL commands

08 February 2023 14:56





SQL functions



DDL commands for Databases

08 February 2023

14:57

1. CREATE

2. DROP

→ CREATE DATABASE campus

→ DROP DATABASE campus

DDL commands for Tables

08 February 2023 15:00

1. CREATE →
2. TRUNCATE →
3. DROP ↘

users

userid	name	email	password
int	↓ varchar (255)	↓ varchar	↓ varchar

Data Integrity ✓

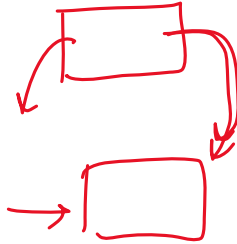
08 February 2023 15:00

Data integrity in databases refers to the accuracy, completeness, and consistency of the data stored in a database. It is a measure of the reliability and trustworthiness of the data and ensures that the data in a database is protected from errors, corruption, or unauthorized changes.

There are various methods used to ensure data integrity, including:

✓ **Constraints:** → DDL

Constraints in databases are rules or conditions that must be met for data to be inserted, updated, or deleted in a database table. They are used to enforce the integrity of the data stored in a database and to prevent data from becoming inconsistent or corrupted.



→ **Transactions:** a sequence of database operations that are treated as a single unit of work. ✓

✓ **Normalization:** a design technique that minimizes data redundancy and ensures data consistency by organizing data into separate tables.

Constraints in MySQL →

08 February 2023 15:01

Constraints in databases are rules or conditions that must be met for data to be inserted, updated, or deleted in a database table. They are used to enforce the integrity of the data stored in a database and to prevent data from becoming inconsistent or corrupted.



1. NOT NULL →
2. UNIQUE(combo) →
- Another way of creating constraint →
3. PRIMARY KEY →
4. AUTO INCREMENT →
5. CHECK →
6. DEFAULT →
7. FOREIGN KEY →

Referential Actions

1. RESTRICT
2. CASCADE
3. SET NULL
4. SET DEFAULT

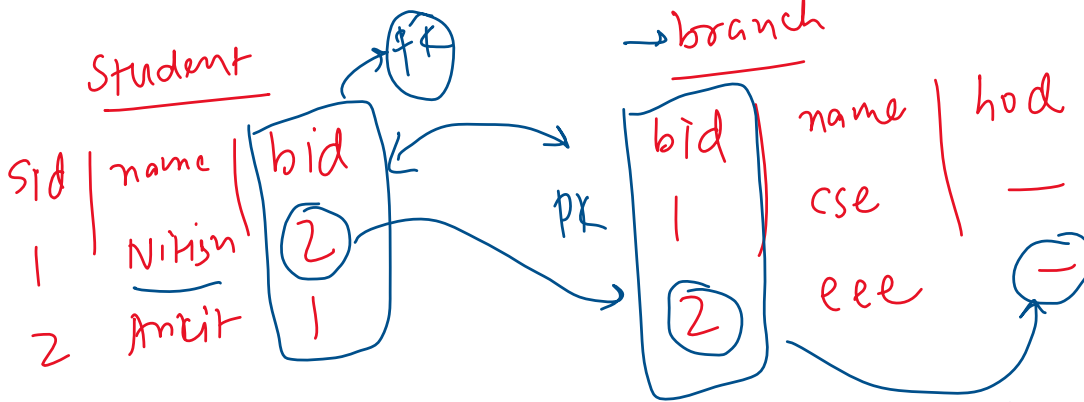
NULL →

Email

users

userid	name	email
70	—	—
71	—	—
72	—	—

Age → age > 13
reg date
—



Rushik

customer
cid | name | email
(pk)

orders
orderid | cid | date
(pk) (fk)

ankit → 20

1 ankit 20
2 ank 20

CASCADE

NULL → 0

CASCADE

NULL → 0

NULL → 0

ALTER TABLE command

08 February 2023 15:02

The "**ALTER TABLE**" statement in SQL is used to modify the structure of an existing table. Some of the things that can be done using the ALTER TABLE statement include

1. Add columns
2. Delete columns
3. Modify columns



Editing and Deleting Constraints

08 February 2023 15:02

1. Add

2. Delete ✓

3. ~~Edit~~

nahi hota
