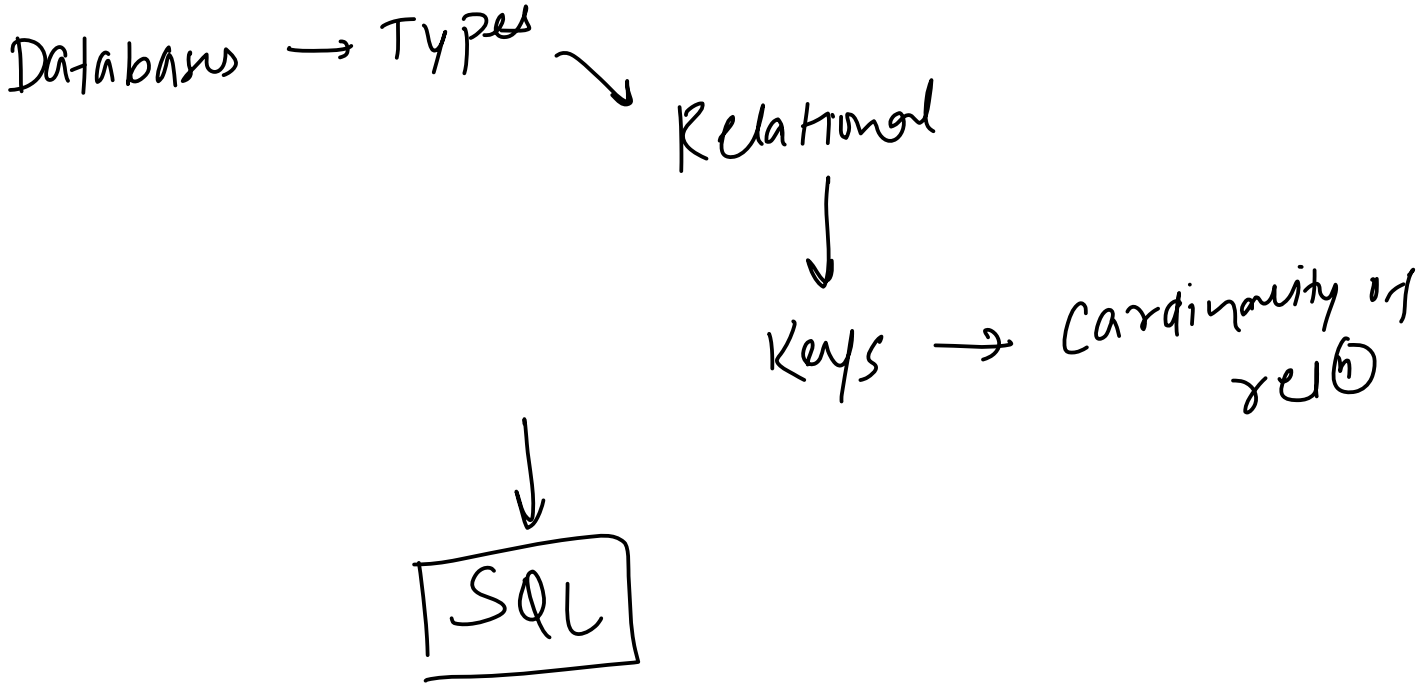
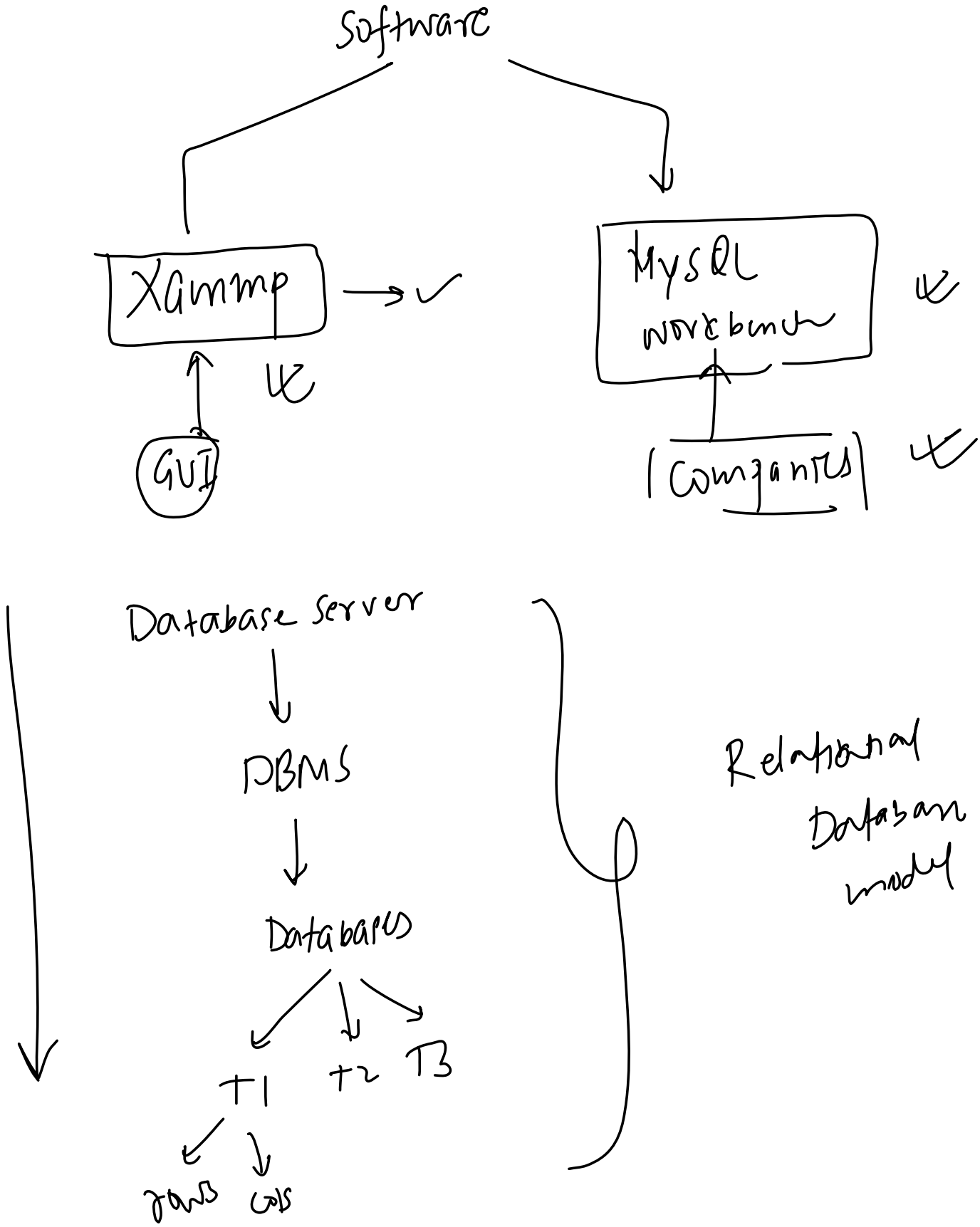
# Till now?

08 February 2023 14:56



# Installation

08 February 2023 16:05



# What is SQL?

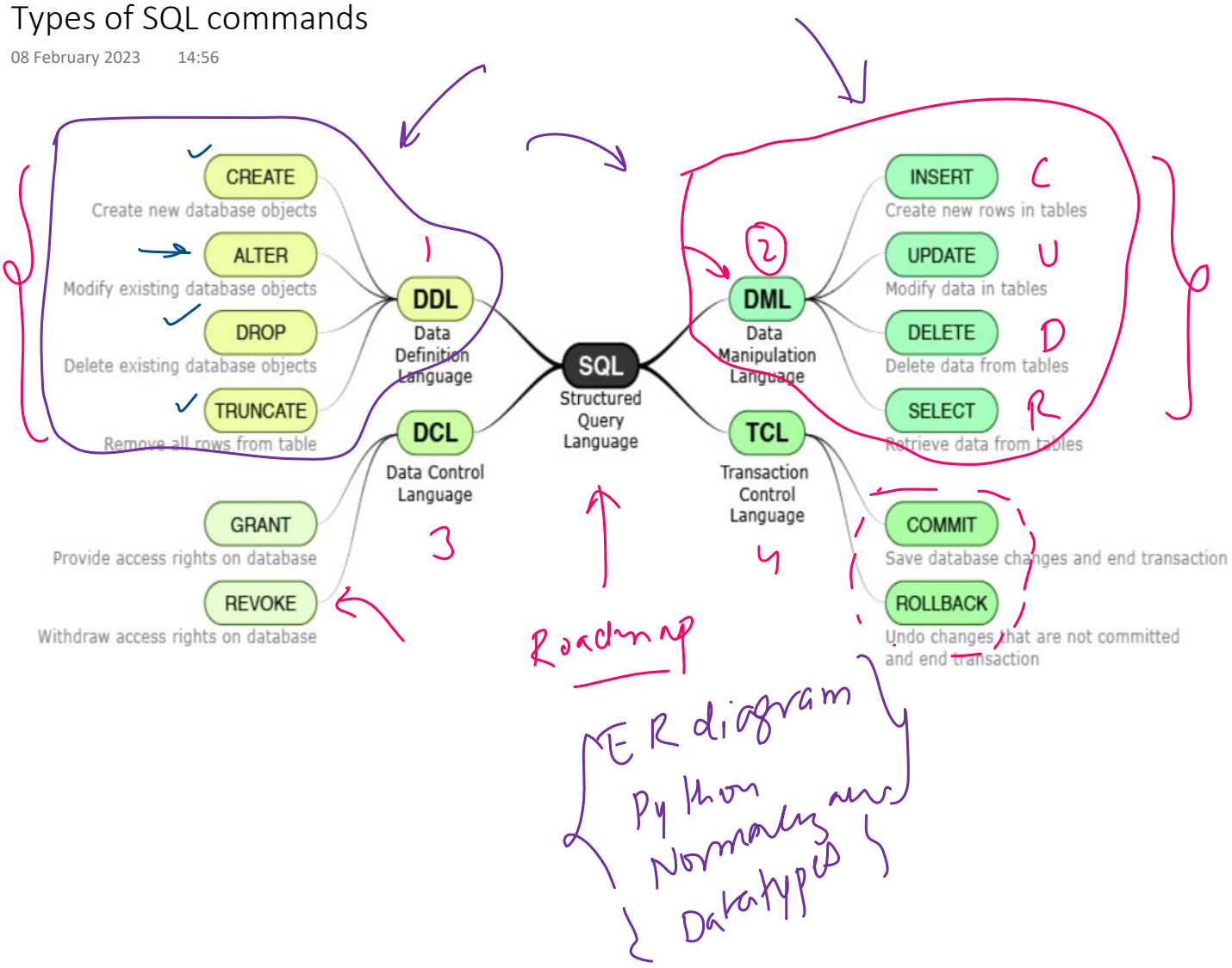
08 February 2023 14:56

CRUD

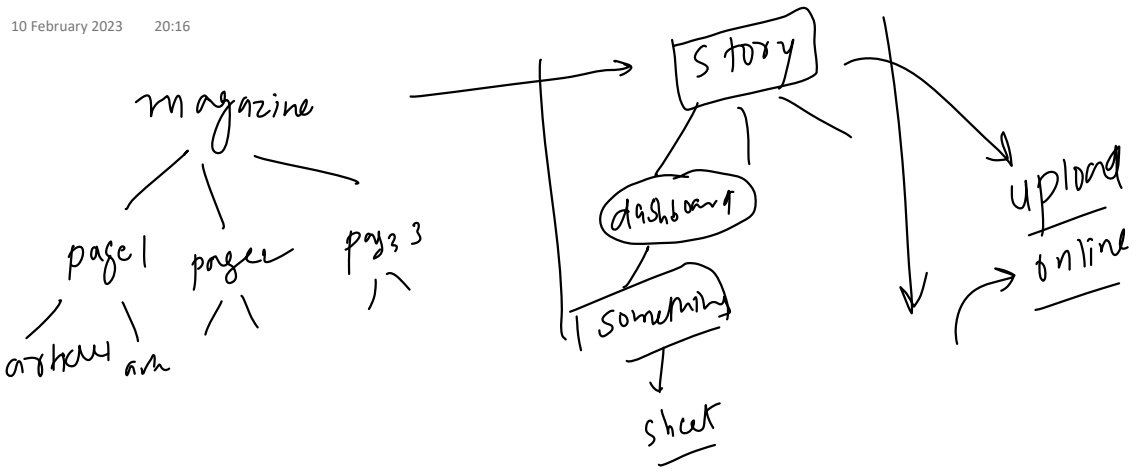
SQL (Structured Query Language) is a programming language used for managing and manipulating data in relational databases. It allows you to insert, update, retrieve, and delete data in a database. It is widely used for data management in many applications, websites, and businesses. In simple terms, SQL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

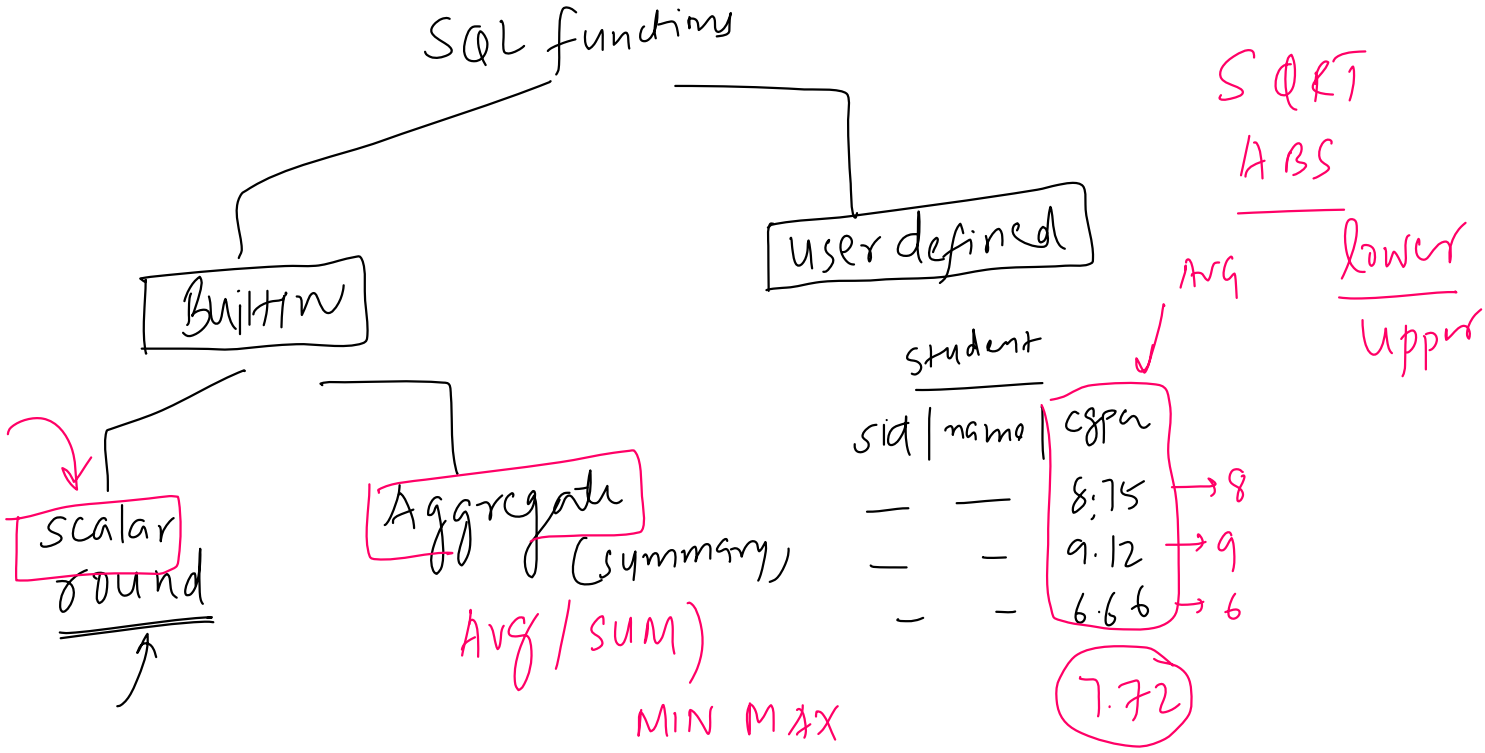
# Types of SQL commands

08 February 2023 14:56



10 February 2023 20:16



# DDL commands for Databases

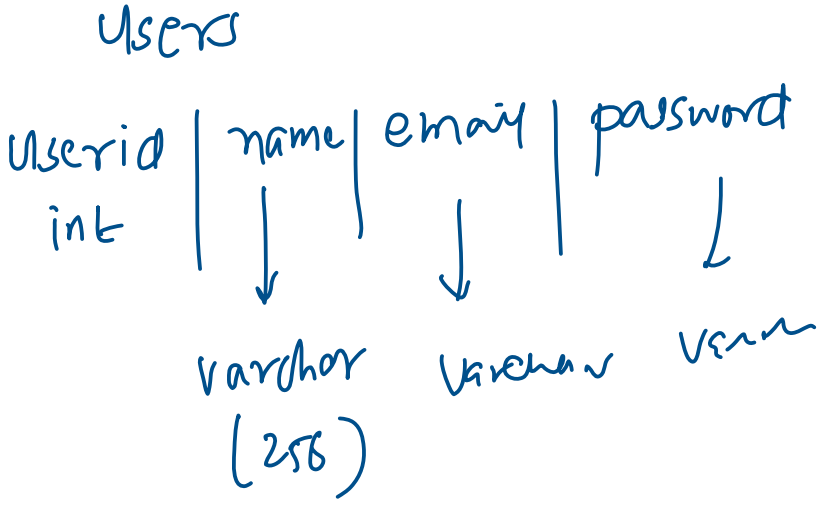
08 February 2023 14:57

1. CREATE → CREATE DATABASE campusx
2. DROP ↘ DROP DATABASE campusx

# DDL commands for Tables

08 February 2023 15:00

1. CREATE
2. TRUNCATE
3. DROP

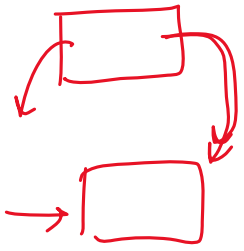


# Data Integrity

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**:
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

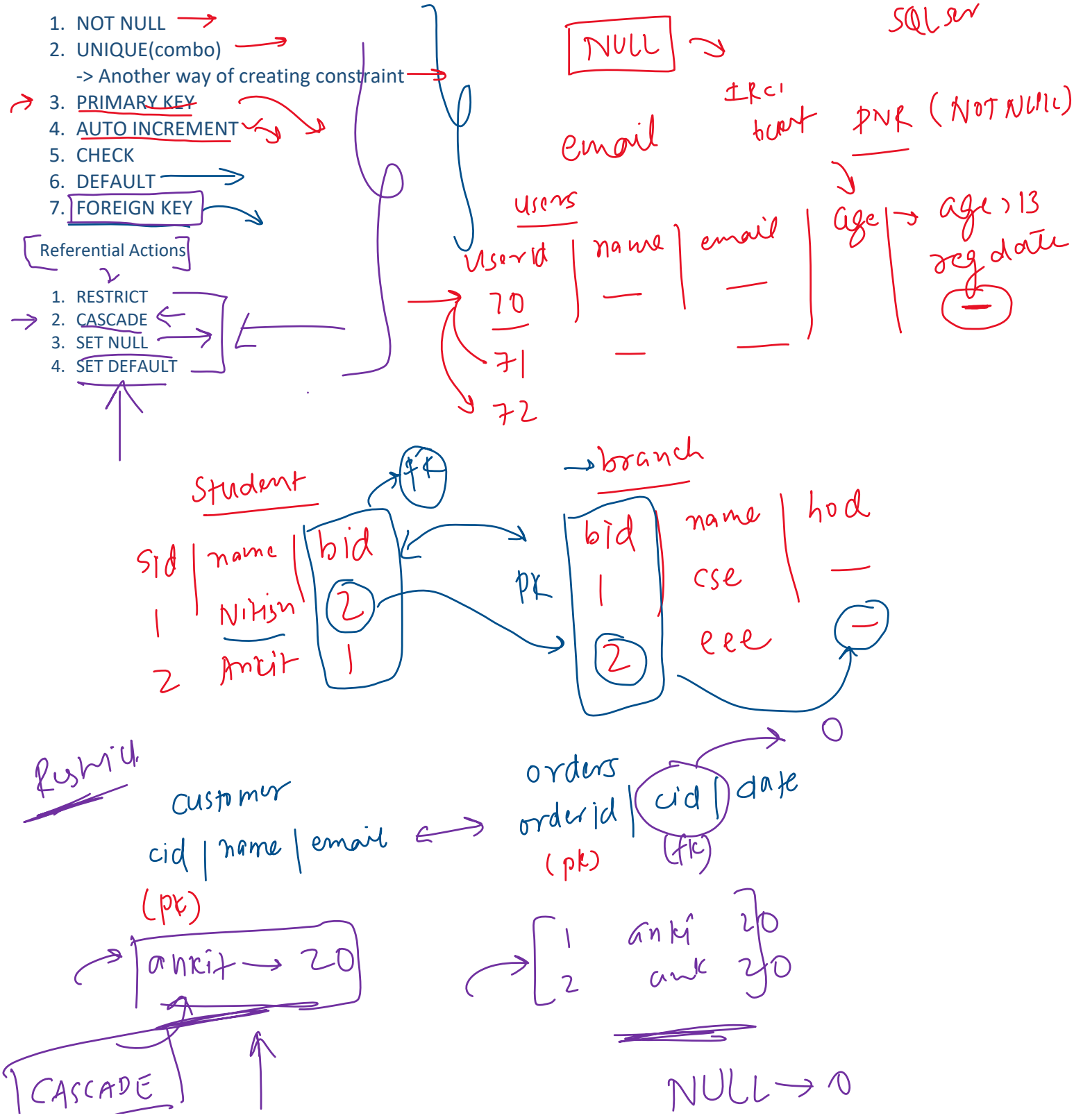
08 February 2023 15:01

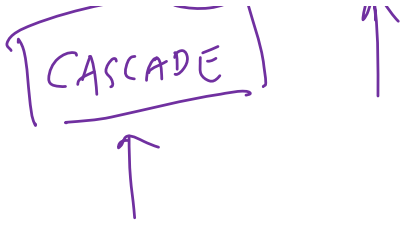
Constraints in databases are rules or conditions that must be met for data to be inserted, updated, or deleted in a database table. They are used to enforce the integrity of the data stored in a database and to prevent data from becoming inconsistent or corrupted.

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 → 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