1. **Intro to Database :** Data vs Information
   Data → Raw, Unorganized
   Information → Organized

2. **Types of Database :** 2 Types

   a. Relational Database (relation between other tables)
   b. Non-relational Database (no relation between other tables)

3. **Properties of Database :**

   a. **Field** → Column
   b. **Record** → Record
   c. **Values (data)** → each value of a cell

4. **Tables and Keys :** [key == field], Key = by which we search in a table.
   <u>keys are 3 types :</u>
   a. **Primary Key** → Each Unique Field (no same data repetition in a field) Which field helps to identify a unique record.
   b. **Composite Primary Key** → 2/2+ field together merged into one field to consider that as a primary key
   c. **Foreign Key** → One table's primary key is a foreign key for another table.

5. **DBMS and RDBMS :** System / Software to manage Database.

   a. Data / information
   b. Hardware (storage)
   c. Software (access hardware)
   d. User (we all)
   e. Processing Unit (rules: hashing, encryption)

   DBMS Advantages :
   a. Organizedly data storing

b. Fast searching
c. Parallel accessing

DBMS Usages :
a. Ticket Purchasing
b. Library Management
c. Educational Institutes
d. Government purpose
e. Websites maintaining

RDBMS : (Relational) → DBMS

6. **Database Relation :** Relation in DBMS are 3 types

    a. **One to One Relation** → There is one record/row with another table's 1 record/row relation.
    b. **One to Many / Many to One Relation** → There is one record with another table's many record relation.
    c. **Many to Many Relation** → There is many record with another table's many record relation.

7.