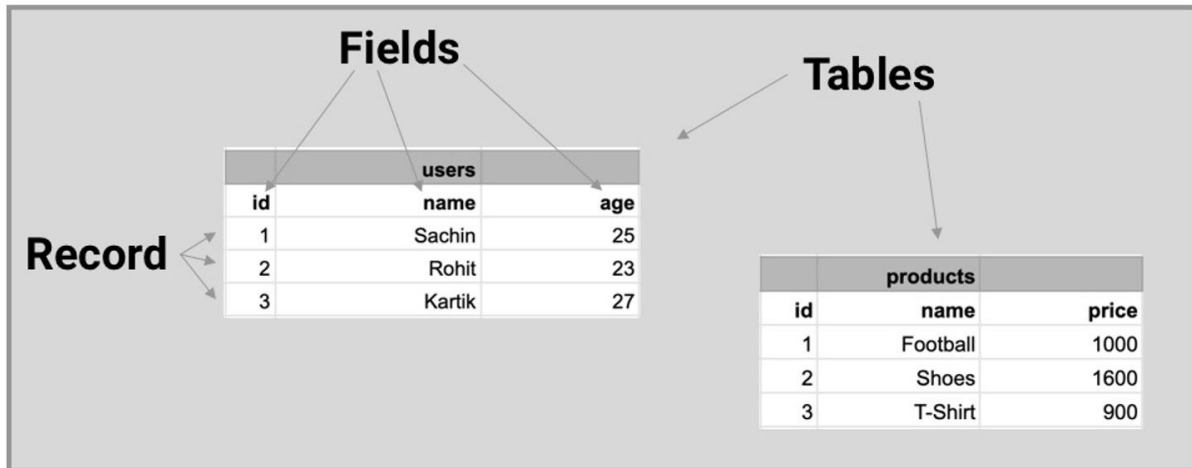# What is Database?

Today we deal with a large amount of data. Almost every website and mobile application are generating lots of data every day and these data need to be handled. This can't be handled with simple software or tools. We need to store all the data and then manage the data with some dedicated system. Here comes the role of Database.

A database is an organized collection of data, so that it can be easily accessed and managed. You can organize data into tables, rows, columns, and index it to make it easier to find relevant information.

Database mainly consists of the following:

- Tables - A table is a collection of related data held in a table format within a database. It consists of columns, and rows.
- Fields and Record - These are two basic components of a database, which is an organized collection of information, or data. The term "fields" refers to columns, or vertical categories of data; the term "records" refers to rows, or horizontal groupings of unique field data.

Database

SharedPreference vs Database

SharedPreference

key	value
NAME	Amit Shekhar
USER_ID	67
USER_NAME	amitshekhar

SharedPreference

- Store Key-Value Data

- Very easy to read data with key
- Can store only smaller data
- Difficult to store structured data
- Not good for search query

Database

- User for multiple instances of similar data and categorized data
- Can store large data
- Stores Structured data
- Good for Search and different types of Query
- Structured Query Language(SQL) is used to access the data stored in a database.

Simply, for storing huge amounts of data, go for SQLite database system. This will allow the user to search for data as well. On the other hand, for storing a small amount of data, go for Shared Preferences. In this case, a huge database system is unnecessary.