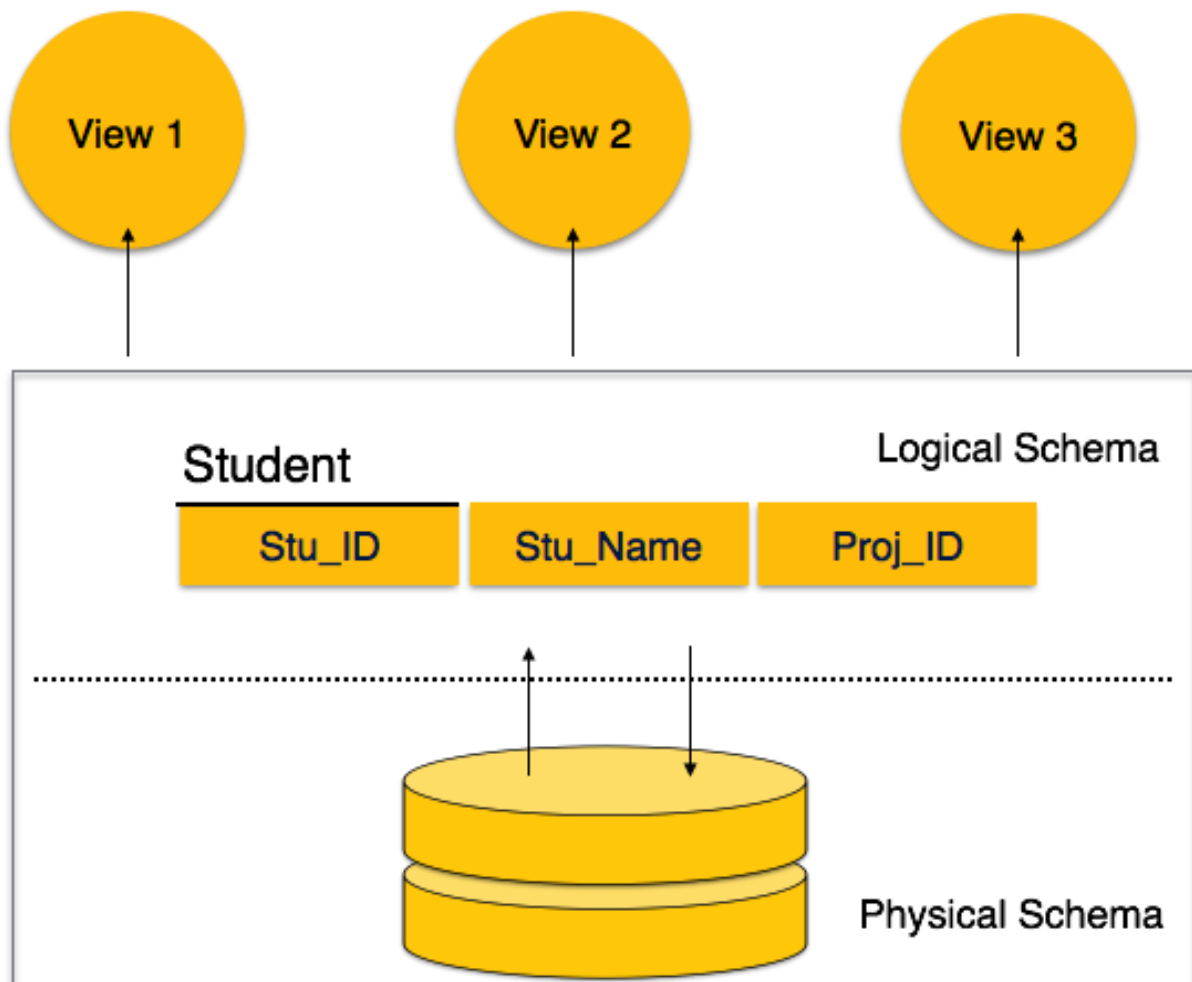


# DBMS Data Schemas

## Database schema

Database schema skeleton structure of and it represents the logical view of entire database. It tells about how the data is organized and how relation among them is associated. It formulates all database constraints that would be put on data in relations, which resides in database.

A database schema defines its entities and the relationship among them. Database schema is a descriptive detail of the database, which can be depicted by means of schema diagrams. All these activities are done by database designer to help programmers in order to give some ease of understanding all aspect of database.



[Image: Database Schemas]

Database schema can be divided broadly in two categories:

- **Physical Database Schema:** This schema pertains to the actual storage of data and its form of storage like files, indices etc. It defines the how data will be stored in secondary storage etc.
- **Logical Database Schema:** This defines all logical constraints that need to be applied on data stored. It defines tables, views and integrity constraints etc.

## Database Instance

It is important that we distinguish these two terms individually. Database schema is the skeleton of database. It is designed when database doesn't exist at all and very hard to do any changes once the database is operational. Database schema does not contain any data or information.

Database instances, is a state of operational database with data at any given time. This is a snapshot of database. Database instances tend to change with time. DBMS ensures that its every instance (state) must be a valid state by keeping up to all validation, constraints and condition that database designers has imposed or it is expected from DBMS itself.

Source:

[http://www.tutorialspoint.com/dbms/dbms\\_data\\_schemas.htm](http://www.tutorialspoint.com/dbms/dbms_data_schemas.htm)