

2.3. What is the difference between a database schema and a database state?

database schema

: description of database structure not detail

It doesn't change frequently

database state

: actual data in database at particular moment

It changes frequently

2.4. Describe the three-schema architecture. Why do we need mappings among schema levels? How do different schema definition languages support this architecture?

- three-schema architecture contains 3 level schemas (External - conceptual - Internal schemas.)

through this, we can insulate between application and physical database.

- Because each schema has different data model, It should be mapped to access other schema

2.5. What is the difference between logical data independence and physical data independence? Which one is harder to achieve? Why?

- logical data independence between external - conceptual schema.
change this?

- physical data independence between conceptual - internal schema.
change this?

External

Conceptual

Internal