

# DATA INDEPENDENCE

(3)

The Representation of Data from program that use the Data. There are 2 types of Data Independence

1. Logical Independence
2. Physical data Independence

## 1. Logical Data Independence:

The ability to change the logical schema of Data base without changing external Schema known as logical data Independence.

Ex: Additional or Removal or new attribute in a table.

## 2. Physical Data Independence:

The ability of change Physical or external Schema without changing the Logical Schema

Ex: File orientation or file allocation techniques.

# RELATIONAL MODEL

Def: Relation should have atleast one field each row value should have unique value and <sup>each</sup> cell contain a single value. Relation is a logical structure not a physical. It is also known as table.

In a relation data is organised in form of row & column.

## BASIC CONCEPT OF RELATION

① Entity :- It is name of object about which user want to store an information like student, employee, chair, table.

2. Attribute:- An attribute is a name give to a column in a table. Each attribute of specific Entity has unique name. Attribute are used to uniquely indentify the record. Eg:- Attributes of a students - Name, rollno., class, Phno.,

3. Tuple :- The row of relation that contain the value corresponding to the attributes are known as Tuple.

Name	RollNO.	course	subject
AB	11	B.Sci	CA
CD	12	"	"

→ Tuple

4. Domain :- The possible set of value that an attribute can accept. Each attributes can have set of possible values known as Domain.

5. Degree :- The no. of attribute in a relation is known as Degree of that relation.

6. Cardinality :- The no. of record or tuples ~~no~~ of any point of time in a relation is called cardinality.

DB → table → Record → field

## RELATIONAL KEYS

Def. The Basic purpose of Key's is to the remove duplicacy in a relation as well as uniquely indentify the row of a table.