2) Relational Model

Employee works under on organization

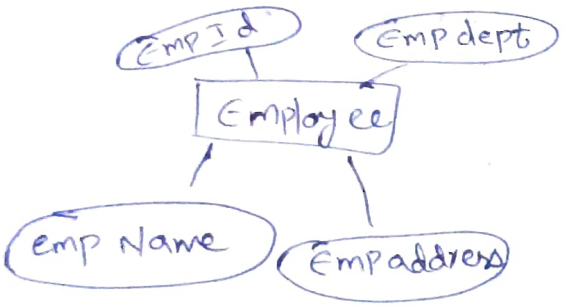
Entities: 1. Employee
2. Organizations

Relationship: work in

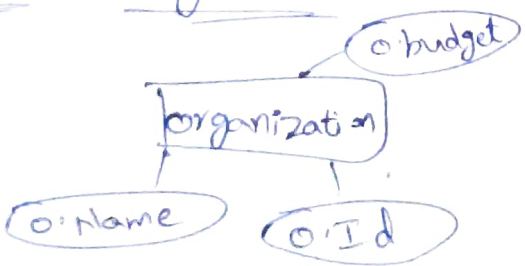
Employee (EmpId Int, Emp dept string, Emp Name, Empaddress).

Organization (O.Name string, O.Id Integer, O.budget Integer)

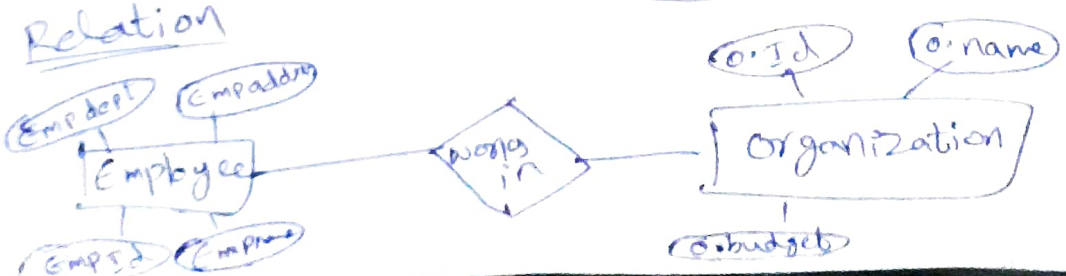
ER diagram for Employee



ER diagram for Organization



Relation



Relational Model concepts

Student

R.NO	Name	Address	Phone	Age
1	Ram	Delhi	123456	18
2	suresh	Hyd	7890123	20
3	Rani	Bombay	3456789	~~20~~ 19
4	Sunitha	Pune	NULL	17

1) **Attributes:** Attributes are the properties that define a relation.

Ex: RollNo, Name, address, phone Age

2) **Relation schema:** A Relation schema represents name of the relation with its attributes

Ex: Student (R.no, Name, address, phone and age) is relation schema for student.

3) **Tuple:** Each row in the relation is known as tuple (4)

Ex: In student table 4 rows.

4) Relation Instances: The set of tuples of a relation at a particular instance of time is called as relation Instance.

Ex: student at a particular time. It can change whenever there is insertion, deletion or updating in the database.

5) Degree: The number of attributes in the relation is known as degree of the relation.

Ex Table student degree 5.

6) cardinality: The number of tuples in relation is known as cardinality.

Ex: Table student cardinality 4.

7) column: column represents the set of values for a particular attribute.

Ex: The column R.no is extracted from relation Student.

8) NULL values: The value which is not known or unavailable is called NULL value. It is represented by blank space.

Ex: Phone of student having Roll-no 4 is NULL