



1. Find out the entity type

- Employee (Name, Ssn, Address, Bdate, Salary, Sex) - Strong Entity
- Department (Name, Number, Locations) - Strong Entity
- Project (Name, Number, Location) - Strong Entity
- Dependent (Name, Sex, Birth_date, Relationship) - Weak entity

2. Find out the relationships

- Works for
- Manages
- Controls
- Works On
- Depends of - Identifying Relationship

3. Describe the ER Diagram in words

1. Many employees work for one department

All departments have employees.

=> Department has 4 data

Name & Number are unique datas to identify a department

Locations : This will have different other datas. A department can have different locations.

No. of employees: This data will be taken from Employee data

=> Employee has 6 data

Name further has fname, mname, lname.

Address, Salary, Sex, Bdate.

Ssn is a specific data to identify a student.

2. Employee manages a department

All departments will be managed by employees. (one department will be managed by an employee)

It also has a data of when the employee started working in that department.

3. Employee works on Project

More than 2 employees can work on projects.

The employees project is based on hour count.

=> Project has 3 data

Name & Number are specific data which unifies the project.

Project has different locations.

4. A department controls many project

All projects will be controlled by department.

5. An Employee depends on many dependent

=> Dependent has 4 datas

Name, Sex, Birth_date & Relationship are not a specific data to differentiate.

6. An Employee supervise many employees

The higher level employee of an organization can supervise the lower level employees using his position.