

1.Find out the entity type

Employee(Ssn, BDate, Name , Address, Salaray, Sex)

Department (Name, Number, Location)

Projects (Location, Name, Number)

Dependent (Name, B_date, Relationship, Sex)

2.Find out the relationships

Employees Works for Department

Employees Manages_on Department

Employee Works_on projects

Department Controls Projects

Employee Supervisions

Employee dependent_of dependent

3.Describe the ER Diagram in words

Employee works_for Department

1. Many employees can work on department.
2. One employee can only work on one department.
3. All employees must work on one department.
4. In every department at least one employee must work.
5. Employee have Ssn Name, address, BDate, Salary, Sex
6. Employee can identify by Ssn
7. Name can be divisible as Fname Minit Lname.
8. Department has Location, Name, Number and Number of employees
9. Department can be identify by Name and Number.
10. Location has multi values.
11. Number of employees can be taken from name

Employee manges department

1. One employee can only manage on one department
2. Every department must managed by one employee
3. Management no need for all employees.
4. Manages has start_date

Employee works_on project

1. All employee can work on many project.
2. In project many employees can work
3. All employees must work on projects
4. In all project employees must work.
5. Hours can be identify from works_on.
6. Project has Name, Number, Location
7. Project can identify by Name and Number.

Employees dependent_of Dependent

1. One employee has able many dependent.
2. One dependent only dependent on one employee.
3. All employees no need to have dependent but every dependent must dependent on one employee.
4. Dependent has Name, Sex, BDate, Relationship.

Departments controls project

1. One department can control many project.
2. One project can only control by one department.
3. All department no need to control project
4. All project must control by one department.

Employee supervisions

1. One employee can be supervisor for many employee.
2. One employee can supervise by one employee