

1.Find out the entity type

Employee(Ssn, Bdate, Name, Address, Salary, Sex)

Department(Name, Number, Location)

Project(Name, Number, Location)

Dependent(Name, Sex, Birth_date , Relationships)

2.Find out the relationships

Employee works for Department

Employee manage Department

Employee works on Project

Employee dependents of dependent

Department controls the project

Employee supervision

3.Describe the ER Diagram in words

1.Employee works for Department

Many employee can work in one department

One employee can only work in one department

All employees must work in one department

In every department, At least one employee must work

Employee can have ssn, name, Bdate, address, Sex, Salary

Employee can identify by ssn

Name can be divisible as Fname, Minit, Lname

Department has Location, Name, Number and Number of employees

Department can be identified by name and number

Location has multivalued

Number of employees can be taken form name

2. Employee manage Department

One employee can only manage on one department

Every department must managed by one employee

Management no need for all employees

Manages has start date

3. Employee works on Project

All employees can works on many projects

In project, many employees can work

All employees must work on projects

In all projects, employees must work

Hours can be identified from works_on

Project has Name, Number, Location

Project can identified by from Name and Number

4. Employees dependents_of Dependent

Many employee has able many dependent

One dependent only dependent on one employee.

All employee no need to have dependent but every dependent must dependent on one employee.

Dependent has Name, Sex, Bdate, Relationships

5. Departments controls projects

One department can control many project

One project can only control by one department

All departments no need to control all projects

All projects must control by one department

6. Employee supervisions

One employee can be supervisor many employee

One employee can supervise by one employee.