

1. Find out the entity type

Employee (ssn,fname,minit,lname,Bdate,address,salary,sex) - Strong entity

Department (name,number,locations)- Strong entity

Project (name,number,locations) -Strong entity and partial entity

Dependent (name,sex,birth_date,relationship) - Weak entity

2. Find out the relationships

Works_for

Manages

Controls

Supervision

Dependents_of

Works_on

3. Describe the ER Diagram in words

- Employee is strong entity it's have ssn,name,address,salary and sex attributes. Ssn is primary key. Name is composite attribute it's have fname,minit and lname values.
- Department entity have name,number and location attributes. Locations is multivalued attribute
- 1 Supervisor is supervisee many employee.
1 employee supervisee by 1 supervisor.
- 1 employee work for 1 department
1 department have many employee
- 1 employee manage 1 department
1 department manage 1 employee
- 1 department controls many project
1 project controls by 1 department
- 1 employee works on many project
1 project have many employee
- 1 employee depends of many dependent
1 dependent have 1 employee