

1. Find out the entity type

- **Strong Entity**  
Employee-(Name,Salary,Sex,Address,Ssn,Bdate)
- **Strong Entity**  
Department-(Name,Number,Location)
- **Strong Entity**  
Project-(Name,Number,Location)
- **Weak Entity**  
Dependent-(Name,Sex,Birth\_date,Relationship)

2. Find out the relationships

1. Employee relates as works\_for with Department many to one relationship.
2. Employee relates as manages with Department one to one relationship.
3. Employee relates as work\_on with Project many to many relationship.
4. Project relates as controls with Department many to one relationship.
5. Employee weak relates as dependents\_of with Dependent one to many relationship.

3. Describe the ER Diagram in words

**Entity and Attribute Description**

1. Employee:-Name,Bate,Salary,Sex,Address,Ssn  
Primary key is nothing  
Here Location attribute is multivalued
2. Department:-Name,Number,Location  
Primary key is Name and Number
3. Project:-Name,Number,Location  
Primary key is Name and Number
4. Dependent-Name,Sex,Birth\_date,Relationship  
Primary key is Name  
Here Dependent entity is weak entity

**Relationship Description**

1. Employee relates as works\_for with Department many to one relationship.
2. Employee relates as manages with Department one to one relationship.
3. Employee relates as work\_on with Project many to many relationship.
4. Project relates as controls with Department many to one relationship.
5. Employee weak relates as dependents\_of with Dependent one to many relationship.

**Data flow Description**

1. Employee relates with department Both of relationship's attributes are much full and full
2. Employee relates with Project Both of relationship's attributes are much full and full
3. Project relates with Department Both of relationship some of attributes are much
4. Employee weak relates with Dependent Both of relationship some of attributes are much