



1. Find out the entity type

EMPLOYEE(Ssn, Name, Salary, Bdate, Address, Sex) - strong entity

PROJECT(Name, Number, Location)- strong entity

DEPENDENTS(Name, Birth_date, Sex, Relationship) -WeakEntity

DEPARTMENT(Name , Number, Locations)

2. Find out the relationships

EMPLOYEE TO EMPLOYEE - ONE TO ONE

EMPLOYEE TO DEPARTMENT - MANY TO ONE

DEPARTMENT TO EMPLOYEE - ONE TO ONE

DEPARTMENT TO PROJECT - ONE TO MANY
EMPLOYEE TO PROJECT - MANY TO MANY
EMPLOYEE TO DEPENDENT - ONE TO MANY

3. Describe the ER Diagram in words.

This is a system of a company between employees, project and their departments.

There are 3 strong entity and a weak entity that is DEPENDANT

Employee has a primary key that is Ssn and name is composite attribute.

DEPARTMENT entity has the composite key and multivalued location and it has derived attribute number of employees

Project entity has project name, number and location

Dependant is weak entity and it has name and other 3 attributes.

A relationship, name departments of that is the weak relationship is used to connect strong entity and the weak entity.

Employee works on relationship full of participation with Project (many to many)

An employee becomes a supervisor and supervises the whole employees.

Full employees participate and are separated for the department wise (many to one)

Employee manages department the manage relation has a descriptive attribute of start date