**Exercise 1 Solution**

* First, we shall design the entities and relationships.
  + “Employees *work in departments…”*
  + *“…each department is managed by an* employee…”
  + “…a child must be identified uniquely by *name when the parent (who is an* employee; assume that only one parent works for the company) is known.”

1. **Entities and Attributes:**

Employee (ssn, salary, phone)

Department (dno, dname, budget)

Child (name, age)

1. **Entity Relationships**

Employee – Department (works\_in) many –to-many

Manager – Department (Manages) one-to-one

Employee – Child (dependent) one-to-many



