**Exercise 1**

**Problem:**

* A company database needs to store information about employees (identified by *ssn, with salary and phone as attributes), departments (identified by dno,* with *dname and budget as attributes), and children of employees (with name and age* as attributes).
* 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.
* We are not interested in information about a child once the parent leaves the company.

1. From the text define the all possible entities and their corresponding attributes.
2. What are the possible relationships between entities?
3. Draw an ER diagram that captures this information.

[[1]](#endnote-1)

1. Entities:  
   Employee  
   Child

Department

1. Attributes:  
   Employee(ssn, salary,phone)  
   Child(employee\_ssn,fname)  
   Department(dno,dname,budget)
2. Relationships:  
   Employee-Department (M-M)  
   Employee-Child (1-M)

1. Note: Use Gliffy for chrome here is the link: <https://chrome.google.com/webstore/detail/gliffy-diagrams/bhmicilclplefnflapjmnngmkkkkpfad?hl=en> [↑](#endnote-ref-1)