# SQL – Assignment 1\_Opt1

For the following requests, pack your answers into the zip file Assignment1\_AccountName.zip, then handle to the evaluator via email ([XYZ@fsoft.com.vn](mailto:XYZ@fsoft.com.vn))

Barem: Q1-50%, Q2-50%

## Question 1

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. Draw an ER diagram that captures this information.
2. Convert from ER diagram to relational schema

## Question 2

Consider the following relations for a database that keeps track of student enrollment in courses and the books adopted for each course (Primary Key is mark post-fix with #):

**STUDENT** (SSN#, Name, Major, Bdate)

**COURSE** (Course#, Cname, Dept)

**ENROLL** (SSN, Course#, Quarter, Grade)

**BOOK\_ADOPTION** (Course#, Quarter, Book\_ISBN)

**TEXT** (Book\_ISBN#, Book\_Title, Publisher, Author)

Draw a relational schema diagram specifying the foreign keys for this schema.