# SQL – Assignment 1\_Opt2

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: Q1-30%, Q2.1-40%, Q2.2-30%

**Question 1:**

Consider the following relations for a database that manage book information in library. The information include: Book title, Author, Publisher, Category and Book format.

Note:

* Primary Key is mark post-fix with #
* ISBN stands for “International Standard Book Number”

**BOOK\_TITLE** (ISBN\_Number#, Title, PublisherID, PublishedDate, BookFormat, Pages, Price)

**BOOK\_AUTHOR** (ISBN\_Number#, AuthorID#)

**AUTHOR** (AuthorID#, AuthorFirstName, AuthorLastName)

**PUBLISHER** (PublisherID#, PublisherName)

**BOOK\_CATEGORY** (ISBN\_Number#, CategoryID#)

**CATEGORY** (CategoryID#, CategoryDescription)

**BOOK\_FORMAT** (BookFormat#, FormatDescription)

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

**Question 2:**

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