# Homework 5

Your Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student ID:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**1. Use DDL to answer the following questions. Note: you do not need to run SQL in Oracle. Just give the answers for the following requests [40]**

Diagram

Description automatically generated

1). Use DDL to create a database named as “BookInfo”. Create the tables, except the table “BookAuthor” [5]

2). Create the table BookAuthor without definition of keys. [5]

3). Add PK and FK to the table BookAuthor [5]

4). Drop table “Authors” [5]

5). Add a new attribute “ISBN” to the table “Books”, and set it as primary key [5]

6). In the table “Books”, we have the attribute “publisher” which refers to the publisher name. Now, we want to have a new entity “Publisher” with attributes, such as PublisherID, PublisherName, Address, Country, Tel, ContactPersonName, ContactPersonalEmail. Use DDL to make relevant changes. [5]

7). Add default value 9.9 to “Price” in table “Books” [5]

8). Update the datatype as varchar(200) for ImageUrl in table “Books” [5]

**2. By using the sample of the data tables below, using SQL to answer the following questions [40]**

**Note: the tables below just gave you sample data, you should assume that there are many more rows in each table. These sample rows are just used for you to better understand the values in each table. You do not need to run them in Oracle**

A picture containing text, receipt

Description automatically generated

1. how many tutors have a status of temp stop? Which tutors are active?
2. List the IDs of the tutors who are currently tutoring more than 1 student
3. Get the list of student groups and also return the number of students in each group
4. Which student has the highest Read score? And what is the score for that.
5. Show the average, max, min Read scores per student group

**3. use the EnrollSys database (W6\_Enrollment.sql) we introduced in the class, and write down the SQL statements to answer the following questions. [20]**

Note:

* You should provide your SQL statement, as well as the snapshot of the outputs in your Oracle
* Use a single SQL query for the following questions
* Note that you should have the capability to write down correct SQL statement without running/examining them in the Oracle

1). Return a list of unique courses along with the number of classes associated with it, rank the courses by the number of classes in descending order. Note: a class can be considered as a section in a course

1. . Return a list of unique departments along with the number of courses operated by the department
2. . Find how many faculties are from IL, or age is > 55
3. . Find the average age for students who are from IL, PA, WA, CA, OH, MA
4. . return the min, max and avg score of the unique courses, only for the courses graded before 2017, and the min grade is > 60