SQL BASICS

Training Assignments

Program Code	BSQL
Version	3.1
Effective Date	01/11/2016

Hanoi, 11/2016

RECORD OF CHANGES

*A - Added M - Modified D - Deleted

Date	Changes	A* M, D	Contents	Version
14-Oct-2016	Create	A	Add the new assignments.	v1.0
14-Oct-2018	Update	M	Template.	v1.1
01-Jun-2019	Update	M	Update Objective	v1.2

RECORD OF CHANGES

Contents

CODE:	BSQL_Assignment1_Opt3
TYPE:	n/a
LOC:	n/a
DURATION:	120 MINUTES

For the following assignments:

- Print out respectively the screenshots to show the query results.
- Pack **screenshots** and **SQL scripts** or **your answers** into the zip file named BSQL_Assignment<i>_AccountName.zip (for instance: BSQL_Assignment1_NamNT.zip) then handle to the evaluator via email (XYZ@fsoft.com.vn) or follow the guidance of the class admin.

Day 1. Lesson 1: Database Basics

Assignment 1_Opt3: Pharmacy Management

1. Exercise 1

Barem: 30%

Objective: K4SD (Understand basic database knowledge (DBMS, RDBMS, ERD))

Problem Description:

The following is a description of some data requirements for a chain of pharmacies.

- A pharmaceutical company manufactures one or more drugs, and each drug is manufactured and marketed by exactly one pharmaceutical company.

- Drugs are sold in pharmacies. Each pharmacy has a unique identification. Every pharmacy sells *one or more drugs*, but some pharmacies do not sell every drug.

- Drug sales must be recorded by prescription, which are kept as a record by the pharmacy. A prescription clearly identifies the drug, physician, and patient, as well as the date it is filled.

- Doctors prescribe drugs for patients. A doctor can prescribe one or more drugs for a patient and a patient can get one or more prescriptions, but a prescription is written by only one doctor.

Pharmaceutical companies *may have* long-term contracts with pharmacies and a pharmacy can contract with zero, one, or more pharmaceutical companies. Each contract is uniquely identified by a contract number.

Questions to answer:

Draw the appropriate entity-relationship (E-R) diagram.

Estimated Time to complete: 60 mins.

2. Exercise 2

Barem: 30%

Objective: K4SD (Understand basic database knowledge (DBMS, RDBMS, ERD))

Problem Description:

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#)

BOOK(Book_ISBN#, Book_Title, Publisher, Author)

Questions to answer:

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

Estimated Time to complete: 60 mins.

-- THE END --

STUDENT(SSN#, Name, Major, Bdate)

COURSE(Course#, Cname, Dept)

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

BOOK_ADOPTION(Course#, Quarter, Book_ISBN#)

BOOK(Book_ISBN#, Book_Title, Publisher, Author)