Assignment-3 ITI-2180 Foundations of Data and Database Management

1. Chapter 4 Hands-on Assignment (problems A – J: see below) – 50 points

Problem A: Modify the following SQL command so that the Rep\_ID column is the PRIMARY KEY for the table and the default value of Y is assigned to the Comm column. (The Comm column indicates whether the sales representative earns commission.)

CREATE TABLE store\_reps (rep\_ID NUMBER(5),

last VARCHAR2(15), first VARCHAR2(10), comm CHAR(1));

Problem B: Change the STORE\_REPS table so that NULL values can’t be entered in the name columns (First and Last).

Problem C: Change the STORE\_REPS table so that only a Y or N can be entered in the Comm column.

Problem D: Add a column named Base\_salary with a datatype of NUMBER(7,2) to the STORE\_REPS table. Ensure that the amount entered is above zero.

Problem E: Create a table named BOOK\_STORES to include the columns listed in the following chart.

Problem F: Add a constraint to make sure the Rep\_ID value entered in the BOOK\_STORES table is a valid value contained in the STORE\_REPS table. The Rep\_ID columns of both tables were initially created as different datatypes. Does this cause an error when adding the constraint? Make table modifications as needed so that you can add the required constraint.

Problem G: Create a table named REP\_CONTRACTS containing the columns listed in the following chart. A composite PRIMARY KEY constraint including the Rep\_ID, Store\_ID, and Quarter columns should be assigned. In addition, FOREIGN KEY constraints should be assigned to both the Rep\_ID and Store\_ID columns.

Problem H: Produce a list of information about all existing constraints on the STORE\_REPS table.

Problem I: Add a primary key to the STATE column of the TAX table.

Problem J: Add a foreign key constraint to ensure referential integrity in the CUSTOMERS and ORDERS tables related to the TAX table. In other words, a CUSTOMERS address can't contain a state that does not exist in the TAX table, and ORDERS can't be shipped to a state that does not exist in the TAX table.

WARNING: Although optional in SQL syntax, it is required that you name all constraints, including the NOT NULL constraint.