**Course code: INFS1603**

**Tutorial session (**T18A**):**

**Week number (**Week 8**):**

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**Student Solution(s):**

Homework 7 (Due in Week 8)

**Hands-On Assignments – Chapter 3**

Create a new table containing the category code and description for the categories of books sold by JustLee Books. The table should be called CATEGORY, and the columns should be CatCode and CatDesc. The CatCode column should store a maximum of 2 characters, and the CatDesc column should store a maximum of 10 characters.

**CREATE TABLE zjlb\_category**

**(**

**CatCode VARCHAR2(2),**

**CatDesc VARCHAR2(10)**

**);**

**DESCRIBE zjlb\_category;**

Table

Description automatically generated

Create a new table containing these four columns: Emp#, Lastname, Firstname, and Job\_class. The table name should be EMPLOYEES. The Job\_class column should be able to store character strings up to a maximum length of four, but the column values shouldn’t be padded if the value has less than four characters. The Emp# column contains a numeric ID and should allow a five-digit number. Use column sizes you consider suitable for the Firstname and Lastname columns.

**CREATE TABLE zjlb\_employees**

**(**

**Emp# NUMBER(5,0),**

**Lastname VARCHAR2(100),**

**Firstname VARCHAR2(100),**

**Job\_class VARCHAR2(4)**

**);**

**DESCRIBE zjlb\_employees;**

Text

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Add two columns to the EMPLOYEES table. One column, named EmpDate, contains the date of employment for each employee, and its default value should be the system date. The second column, named EndDate, contains employees’ date of termination.

**ALTER TABLE zjlb\_employees**

**ADD EmpDate DATE DEFAULT SYSDATE;**

**ALTER TABLE zjlb\_employees**

**ADD EndDate DATE;**

**DESCRIBE zjlb\_employees;**

Table

Description automatically generated

Modify the Job\_class column of the EMPLOYEES table so that it allows storing a maximum width of two characters.

**ALTER TABLE zjlb\_employees**

**MODIFY (Job\_class CHAR(2));**

**DESCRIBE zjlb\_employees;**

Table

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Delete the EndDate column from the EMPLOYEES table.

**ALTER TABLE zjlb\_employees**

**DROP COLUMN EndDate;**

**DESCRIBE zjlb\_employees;**

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Rename the EMPLOYEES table as JL\_EMPS.

**ALTER TABLE zjlb\_employees**

**RENAME TO jl\_emps;**

**DESCRIBE jl\_emps;**

Table

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**Hands-On Assignments – Chapter 4**

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) );

**CREATE TABLE store\_reps**

**(**

**rep\_ID NUMBER(5)**

**CONSTRAINT rep\_id\_pk**

**PRIMARY KEY,**

**last VARCHAR2(15),**

**first VARCHAR2(10),**

**comm CHAR(1) DEFAULT 'Y'**

**);**

**DESCRIBE store\_reps;**

A picture containing table

Description automatically generated

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

**ALTER TABLE store\_reps**

**MODIFY last NOT NULL;**

**ALTER TABLE store\_reps**

**MODIFY first NOT NULL;**

**DESCRIBE store\_reps;**

Text

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

**ALTER TABLE store\_reps**

**ADD CHECK (comm = 'Y' OR comm = 'N');**

**DESCRIBE store\_reps;**

**Text

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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.

**ALTER TABLE store\_reps**

**ADD base\_salary NUMBER(7,2)**

**CONSTRAINT salary\_gt\_zero**

**CHECK (base\_salary>0);**

**DESCRIBE store\_reps;**

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

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**CREATE TABLE book\_stores**

**(**

**Store\_ID NUMBER(8)**

**CONSTRAINT store\_id\_pk**

**PRIMARY KEY,**

**Name VARCHAR2(30)**

**CONSTRAINT name\_cs**

**UNIQUE NOT NULL,**

**Contact VARCHAR2(30),**

**Rep\_ID VARCHAR2(5)**

**);**

**DESCRIBE book\_stores;**

Text

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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.

**ALTER TABLE book\_stores**

**MODIFY (rep\_id NUMBER(5,0));**

**ALTER TABLE book\_stores**

**ADD CONSTRAINT rep\_id\_valid CHECK (rep\_id > 0);**

**DESCRIBE book\_stores;**

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