Chapter 3 Problem Set

From now on, turn in your semester project documents in a folder that contains a sleeve on both sides. Put your name, ITEC 4200 Semester Project, the semester (e.g. Fall 2019) on the cover of the folder. Enter the information into the Cover Page, which is saved in D2L under Content | Semester Project | Cover Page.

Next, you will use DML to insert the data into all of the tables in your semester project. Start with the script that that creates your tables (Chapter 2 Problem Set).

Following the CREATE statements, write the INSERT statements that put the data into the tables. You will have one INSERT statement per record. Again, you need to pay attention to the order of the statements. If you have created the tables correctly, you can put the INSERT statements for each table in the same order as the CREATE statements.

Some things you need to know:

- Your tables must have 8 - 20 records per table. You may insert more data, as your application requires. But don't be a "minimalist" -- that person that inserts just 8 records in each table because it's the minimum requirement.
- Create a sequence to use as the Primary Key for at least one of your tables.
- Use comments to describe what each section of the script is doing.
- Leave blank lines between create statements so that the script is easy to read.
- Pay attention to error messages when the script is run. You must correct these errors.
- Put a COMMIT statement at the very end of the script.

Your ERD and your script should correspond. That is, the table and column names, primary keys, and foreign keys should match the ERD from Chapter 2. If you make any changes while you are working on your script, make sure to change the ERD so that they still agree.

WHAT TO TURN IN CHECKLIST:

(1) The folder, with a label on front

(2) Printed cover page

(3) Printout of the script used to create and insert the data. PUT YOUR NAME IN COMMENTS AT THE TOP.

As a reminder: **Please print ONE-SIDED, not on both sides of the paper for this and all future documents to turn in.**

Printout of the run of the script that shows "1 row created", etc. The run should not have any errors.

(4) Printout of the populated tables.

(5) Your ERD.

(6) The documents that were turned back to you from Chapter 2 Problem Set.

HERE IS A SAMPLE OF THE SCRIPT, THE RUN, AND PRINTOUT OF THE POPULATED TABLES

```
--Hogwarts Script
-- Dr. Lissa Pollacia     ITEC 4200

-- Drop tables for multiple runs

DROP TABLE Hogwarts_courses;
DROP SEQUENCE hogwarts_courses_seq;
DROP TABLE Hogwarts_professors;
DROP SEQUENCE hogwarts_professors_seq;

-- Create Hogwarts_professors table

CREATE TABLE Hogwarts_professors
(prof_id NUMBER(6),
prof_lastname VARCHAR2(50),
prof_firstname VARCHAR2(50),
prof_email VARCHAR2(60),
CONSTRAINT hogwarts_professors_prof_id_pk PRIMARY KEY (prof_id));


-- Create the Sequence for Hogwarts_professors

CREATE SEQUENCE hogwarts_professors_seq
START WITH 1
INCREMENT BY 1;

-- Create the Hogwarts_courses table

CREATE TABLE Hogwarts_courses
(cour_id NUMBER(6),
cour_name VARCHAR2(45),
cour_symbol VARCHAR2(45),
cour_numOfStudents NUMBER(6),
prof_id NUMBER(6),
CONSTRAINT hogwarts_courses_cour_id_pk PRIMARY KEY(cour_id),
CONSTRAINT hogwarts_courses_prof_id_fk FOREIGN KEY (prof_id)
REFERENCES hogwarts_professors(prof_id));

-- Create the sequence for Hogwarts_courses
CREATE SEQUENCE hogwarts_courses_seq
START WITH 100
INCREMENT BY 100;
```

```
-- Insert data into Hogwarts_professors
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Dumbledore', 'Albus', 'adumbledore@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Flitwick', 'Filius', 'fflitwick@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Hagrid', 'Rubeus', 'rhagrid@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Lupin', 'Remuss', 'rlupin@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'McGonagall', 'Minerva', 'mmcgonagall@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Snape', 'Severus', 'ssnape@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Sprout', 'Pomona', 'psprout@hogwarts.uk');
INSERT INTO Hogwarts_professors(prof_id, prof_lastname, prof_firstname, prof_email)
    VALUES (hogwarts_professors_seq.NEXTVAL, 'Trelawney', 'Sybill', 'strelawney@hogwarts.uk');

-- Insert data into Hogwarts_courses
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Potions for Beginners', 'Potions I', 25, 6);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Divination', 'Divin I', 20, 8);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Charms Second Year', 'Charms II', 28, 2);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Care of Magical Creatures', 'Creatures I', 25, 3);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Herbology Third Year', 'Herb III', 25, 7);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Defense Against the Dark Arts', 'Dark Arts I', 25, 4);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Transfiguration', 'Transfig IV', 25, 5);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'History of Magic', 'History I', 25, 4);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Muggle Studies', 'Muggles II', 25, NULL);
INSERT INTO Hogwarts_courses(cour_id, cour_name, cour_symbol, cour_numOfStudents, prof_id)
    VALUES (hogwarts_courses_seq.NEXTVAL, 'Study of Ancient Runes', 'Runes I', 25, 8);

COMMIT;

-- Display all tables

SELECT * FROM hogwarts_professors;

SELECT * FROM hogwarts_courses;
```

Table dropped. Sequence dropped. Table dropped. Sequence dropped. Table created. Sequence created. Table created. Sequence created. 1 row(s) inserted. Statement processed.

Hogwarts_Professors

PROF_ID	PROF_LASTNAME	PROF_FIRSTNAME	PROF_EMAIL
1	Dumbledore	Albus	adumbledore@hogwarts.uk
2	Flitwick	Filius	fflitwick@hogwarts.uk
3	Hagrid	Rubeus	rhagrid@hogwarts.uk
4	Lupin	Remuss	rlupin@hogwarts.uk
5	McGonagall	Minerva	mmcgonagall@hogwarts.uk
6	Snape	Severus	ssnape@hogwarts.uk
7	Sprout	Pomona	psprout@hogwarts.uk
8	Trelawney	Sybill	strelawney@hogwarts.uk

8 rows selected.

Hogwarts_Courses

COUR_ID	COUR_NAME	COUR_SYMBOL	COUR_NUMOFSTUDENTS	PROF_ID
100	Potions for Beginners	Potions I	25	6
200	Divination	Divin I	20	8
300	Charms Second Year	Charms II	28	2
400	Care of Magical Creatures	Creatures I	25	3
500	Herbology Third Year	Herb III	25	7
600	Defense Against the Dark Arts	Dark Arts I	25	4
700	Transfiguration	Transfig IV	25	5
800	History of Magic	History I	25	4
900	Muggle Studies	Muggles II	25	-
1000	Study of Ancient Runes	Runes I	25	8

10 rows selected.