CSCV 460 Assignment:
Programming Procedures and Triggers in PL/SQL

1 Purpose

In this assignment, you are going to practice writing procedures and triggers in PL/SQL.

2 Movie Database

The database you will use for this assignment is the same one you used for the previous assignments. That is, the database you need is based on the scripts *createtables.sql* and *tuples.sql* distributed before. If you created the tables and loaded data in your previous assignment, you can use the existing database to practice your SQL queries.

The database schema is listed below.

Movie (<u>MovieID</u>, Title, Year, Score, Votes)

Actor(<u>ActorID</u>, Name)

Casting (<u>MovieID</u>, <u>ActorID</u>, Ordinal)

3   Deliverables and Submission Instructions

Create a file called *plsql.sql*, which is a text file containing your procedures and triggers for each of the questions given below.

1. (15 points) Write a procedure **insertToMovie** that inserts a tuple to table *Movie*. Note that the insertion should not be done if the following condition is violated: No more than four movies in any year.

2. Write a procedure **insertToCasting** that inserts a tuple to table *Casting*. Note that the insertion should not be done, if either of the following conditions is violated,

   (a) (15 points) No actor is cast in the same billing order with some other actor in a movie. (For example, 'Leonardo DiCaprio' has Ordinal 1 in movie 'Titanic' and other actor cannot have the same Ordinal value.) The constraint will not affect tuples already in the table.)

   (b) (20 points) No actor can cast in more than three movies in any year

3. (20 points) Add a column *RecentDate* to table *Actor*. Then, write a trigger so that every time when an insertion or update occurs to table *Casting*, the current date, using **SYSDATE**, should be updated in table *Actor* for the actor cast in the movie. Below is an example of using **SYSDATE** to change the RecentDate value for an actor:

```
UPDATE Actor
    SET RecentDate = SYSDATE
    WHERE ....
```

The text file should be formatted as follows.

```
-- Trigger/procedure ?
-- Question text
CREATE
-- Statements to test the procedure or trigger
```

4   Turn-in

Please turn in your script file *plsql.sql* to D2L assignment folder Programming in PL/SQL.

Note that good programming style is always important. Your code should

be clear, concise, and have appropriate comments.