CS 260 - Database Systems
Lab 5

This lab will focus on DDL and action queries using both Oracle SQL Developer and MySQL Workbench. You will write 6 script files, 3 for Oracle SQL Developer and 3 for MySQL Workbench. Be sure to include "Oracle" or "MySQL" in every file name.

Each DMBS will have a script responsible for:
- Creating all objects and inserting all data described in the tables present in this document
- Modifying these tables and constraints as described
- Dropping all created objects

The following rules apply to all scripts:
- Match all table and column names
- All "ID" fields are either primary keys, foreign keys, or both
- All constraints should be named and follow appropriate naming conventions
- You should use sequences' nextval and currval values whenever possible (this will affect your insertion order)
- You should use last_insert_id() whenever possible (this will affect your insertion order)
- You should not hardcode a surrogate key value anywhere in your statements. As a result, you may need to write SELECT statements to help obtain necessary values
- The exact values of the surrogate keys are not important, just that they connect properly to each other.
- You should not declare a foreign key with the "ON DELETE CASCADE" option in this assignment

Script 1: Create and Insert

This script is responsible for the following operations:
- Create the tables on the next page
- The MUSIC_ARTIST, MUSIC_ALBUM and MUSIC_LABEL tables should all use surrogate keys
- Insert the data present in the tables on the next page
- Commit the changes

Please note that I am providing scripts to do the table creation and constraints for this lab so you can focus on the inserts.

MUSIC_ARTIST

ARTIST_ID	ARTIST_NAME	ORIGIN_CITY	GENRE_NAME
2	Nirvana	Seattle, WA	Rock
3	Miles Davis	Alton, IL	Jazz
4	Michael Jackson	Gary, IN	Pop
5	Lil' Wayne	New Orleans, LA	Hip Hop
6	Willie Nelson	Abbott, TX	Country

- There will be less than 1 million entries in this table
- An artist's name will never be more than 100 characters
- The origin city will never be more than 50 characters
- The only possible genres should be those seen in this table

MUSIC_ALBUM

ALBUM_ID	ALBUM_NAME	ARTIST_ID	RELEASE_DATE	RECORDS_SOLD	ORIGINAL_FORMAT	LABEL_ID
2	Nevermind	2	23-SEP-91	30000000	C	2
3	In Utero	2	21-SEP-93	15000000	C	2
4	Kind of Blue	3	17-AUG-59	4000000	V	3
5	Thriller	4	30-NOV-82	65000000	T	4
6	Bad	4	01-SEP-87	45000000	T	4
7	Tha Carter III	5	09-JUN-08	3800000	D	5
8	Red Headed Stranger	6	01-MAY-75	2000000	V	3

- There will be less than 1 million entries
- An album's name will never be more than 100 characters
- There will be less than 1 billion records sold

MUSIC_LABEL

LABEL_ID	LABEL_NAME
2	DGC Records
3	Columbia
4	Epic Records
5	Cash Money

- There will be less than 1 million entries
- A label's name will never be more than 75 characters

MUSIC_FORMAT

FORMAT_ID	FORMAT_NAME
V	Vinyl
T	Cassette Tape
C	Compact Disc
D	Digital

- The format ID will always be a single character
- The name will never be more than 50 characters

Script 2: Modify

This script is responsible for the following operations:
- Create the MUSIC_GENRE table below
  - This allows genres to be updated more easily
- Insert the data present in the MUSIC_GENRE table below
- Replace the genre_name field in the MUSIC_ARTIST table with a genre_id foreign key
- Update the genre data in the MUSIC_ARTIST table
- Get rid of the artist "Lil' Wayne" and all of his albums
  - You should not assume that Lil' Wayne has only a single album in the system
- Commit the changes

MUSIC_GENRE

GENRE_ID	GENRE_NAME
R	Rock
P	Pop
J	Jazz
C	Country
H	Hip Hop

- The genre ID will always be a single character
- The genre name will never be more than 25 characters

Script 3: Drop

This script is responsible for dropping all tables and sequences created in either script. You may assume that all tables exist.