# SQL Programming Project Exercises

# **OracleFlix** Online Media Rentals

## Section 13: Working with DDL Statements

1. Create tables using the attached ERD. Be sure to include the appropriate data types Rental date should default to the sysdate
   - Run a DESC command for each table.

## Section 14: Creating and Managing Constraints

2. Add the following integrity constraints:
   - Create primary key (PK) and foreign key (FK) constraints as needed per ERD
   - Create not null (NN) constraints where necessary as per ERD
   - Create check constraint on rating field in movie table to limit rating values to 'G', 'PG', 'R', 'PG13'
   - Create check constraint on category field in movie table to limit categories to 'DRAMA', 'COMEDY', 'ACTION', 'CHILD', 'SCIFI', 'DOCUMENTARY'
   - Run queries from the data dictionaries for the above constraints.

## Section 15: Creating and Managing Views

3. Create a view called TITLE_UNAVAIL to show the movie titles and media_id of the media not returned yet. The view should not allow any DML operations.
   - Run a SELECT * for the view (after data has been added in later step)

## Section 16: Working with Sequences (Indexes and Synonyms)

4. Create the following sequences to be used for primary key values:

   - Use a sequence to generate PKs for CUSTOMER_ID in CUSTOMERS table
     - Begin at 101 and increment by 1
   - Use a sequence to generate PKs for TITLE_ID in MOVIES table
     - Begin at 1 and increment by 1
   - Use a sequence to generate PKs for MEDIA_ID in MEDIA table
     - Begin at 92 and increment by 1
   - Use a sequence to generate PKs for ACTOR_ID in ACTOR table

    - Begin at 1001 and increment by 1
  - Run queries from the data dictionaries for the above sequences.

5. Add the data to the tables. Be sure to use the sequences for the PKs.
   - Run a SELECT * for each table.

6. Create an index on the last_name column of the Customers table.
   - Run a query from the data dictionary for indexes showing this index.

7. Create a synonym called TU for the TITLE_UNAVAIL view.
   - Run query from the data dictionary for synonyms showing this synonym.
   - Print a SELECT * from the synonym.