SQL Programming Project Exercises

OracleFlix Online Media Rentals

Section 13: Working with DDL Statements

Constraints can be added while creating the tables or by altering them after.

1. Create tables using the attached ERD. Be sure to include the appropriate data types
   - Rental date should default to SYSDATE
   - **Submit** screenshots and command text for each CREATE TABLE statement

Section 14: Creating and Managing Constraints

2. Add the following integrity constraints:
   - **Note**: All constraints other than the NOT NULL constraint must have names that follow professional style guidelines. You do not need to name NOT NULL 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, PG13, NC17, M, R
   - Create check constraint on category field in movie table to limit categories to: DRAMA, COMEDY, ACTION, CHILD, SCIFI, DOCUMENTARY, ROMCOM, WESTERN
   - **Submit** a DESC command for each table – screenshot & text.
   - **Submit** queries from the data dictionaries for the above constraints – screenshot & text.

Section 16: Working with Sequences (Indexes and Synonyms)

3. 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
   - **Submit** queries from the data dictionaries showing the above sequences – screenshot & text

4. Add the data to the tables.
   - Be sure to use the sequences for the PKs.
   - When you enter the additional rows of data in CUSTOMERS - row 2 must contain YOUR personal data. The additional rows should be based on your family.
   - The data in RENTAL HISTORY must show that multiple customers have rented media and that at least one customer has rented more than once.
   - Data in ACTORS must match the movies you offer for rental.
   - **Submit** a SELECT * for each table – screenshot & text

5. Create an index on the last_name column of the Customers table.
   - **Submit** a query from the data dictionary for indexes showing this index– screenshot & text

Section 15: Creating and Managing Views

6. Create a view called NOT_YET_RETURNED to show the movie titles and media_id of the media not returned yet. The view should not allow any DML operations.
   - **Submit** a SELECT * for the view– screenshot & text

7. Create a synonym called NYR for the NOT_YET_RETURNED view.
   - **Submit** a query from the data dictionary for synonyms showing this synonym – screenshot & text
   - **Submit** a SELECT * using the synonym – screenshot & text