CIS 207 Oracle - Database Programming and SQL

HOMEWORK: # 14  DUE:

Sections 16 & 17

Run the following queries in Oracle Application Express. Paste a copy of each query into this word document below the questions or notepad .txt file, save and return via TalonNet:

SECTION 16 LESSON 1 – Working With Sequences
Exercise #1, 2, 3, 4, 6

Oracle Academy 10 Database Programming with SQL Try It / Solve It

1. Using CREATE TABLE AS subquery syntax, create a seq_d_songs table of all the columns in the DJ on Demand database table d_songs. Use the SELECT * in the subquery to make sure that you have copied all of the columns.

2. Because you are using copies of the original tables, the only constraints that were carried over were the NOT NULL constraints. Create a sequence to be used with the primary-key column of the seq_d_songs table. To avoid assigning primary-key numbers to these tables that already exist, the sequence should start at 100 and have a maximum value of 1000. Have your sequence increment by 2 and have NOCACHE and NOCYCLE. Name the sequence seq_d_songs_seq.

3. Query the USERSEQUENCES data dictionary to verify the seq_d_songs_seq SEQUENCE settings.
4. Insert two rows into the seq_d_songs table. Be sure to use the sequence that you created for the ID column. Add the two songs shown in the graphic.

<table>
<thead>
<tr>
<th>ID</th>
<th>TITLE</th>
<th>DURATION</th>
<th>ARTIST</th>
<th>TYPE_CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Island Fever</td>
<td>5 min</td>
<td>Hawaiian Islanders</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Castle of Dreams</td>
<td>4 min</td>
<td>The Wanderers</td>
<td>77</td>
</tr>
</tbody>
</table>

6. What are three benefits of using SEQUENCEs?

**SECTION 16 LESSON 2 – Indexes and Synonyms**

1. What is an index and what is it used for?

4. Create a nonunique index (foreign key) for the DJ on Demand column (cd_number) in the D_TRACK_LISTINGS table. Use the Oracle Application Developer SQL Workshop Data Browser to confirm that the index was created.

6. Use a SELECT statement to display the index_name, table_name, and uniqueness from the data dictionary USER_INDEXES for the DJ on Demand D_EVENTS table.

7. Write a query to create a synonym called dj_tracks for the DJ on Demand d_track_listings table.

**SECTION 17 LESSON 1 – Controlling User Access**

Ex. 1, 2, 4, 5, 9

1. What are system privileges concerned with?
2. What are object privileges concerned with?

4. What commands are necessary to allow Scott access to the database with a password of tiger?

5. What are the commands to allow Scott to SELECT from and UPDATE the d_clients table?

9. If you create a table, how can you pass along privileges to other users just to view your table?

**SECTION 17 LESSON 2 – Creating and Revoking Object Privileges**

**Ex. 5**

5. What is the syntax to accomplish the following?

   a. Create a role of manager that has the privileges to select, insert and update and delete from the employees table

   b. Create a role of clerk that just has the privileges of select and insert on the employees table

   c. Grant the manager role to user scott

   d. Revoke the ability to delete from the employees table from the manager role

**SECTION 17 LESSON 3 – Regular Expressions**

**Ex. 1**

1. Working with the employees table, and using regular expressions, write a query that returns employees whose first name starts with a “S” (uppercase) followed by either a “t” (lowercase) or “s” (lowercase).