

Indexes and Synonyms

Objectives

- Define an index and its use as a schema object
- Define ROWID and its use in locating information in a database
- Name the conditions that cause an index to be created automatically
- Create and execute a CREATE INDEX and DROP INDEX statement
- Query the data dictionary to confirm the existence of an index
- Construct and execute a function-based index that allows case-insensitive searches
- Construct a synonym and using the data dictionary confirm its definition
- Construct and execute a DROP SYNONYM statement

Try It / Solve It

1. What is an index and what is it used for?
2. What is a ROWID, how is it used?
3. When will an index be created automatically?
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.
5. Use the join statement to display the indexes and uniqueness that exist in the data dictionary for the DJ on Demand D_SONGS table.
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.
8. Create a function-based index for the last_name column in DJ on Demand D_PARTNERS table that makes it possible not to have to capitalize the table name for searches. Write a SELECT statement that would use this index.
9. Create a synonym for the D_TRACK_LISTINGS table. Confirm that it has been created by querying the data dictionary.
10. Drop the synonym that you created in question 9.