

### EXERCISE 13

#### Creating Views

1. What are three uses for a view from a DBA's perspective?

To restrict data access - can see only specific columns - rows  
To simplify complex queries - and this is a logical table or view  
To provide data independence - change in table structure doesn't affect queries

2. Create a simple view called view\_d\_songs that contains the ID, title and artist from the DJs on Demand table for each "New Age" type code. In the subquery, use the alias "Song Title" for the title column.

CREATE OR REPLACE VIEW view\_d\_songs AS  
SELECT d, Title AS "Song Title",  
artist FROM d\_songs WHERE type\_code = 'NEWAGE';

3. SELECT \* FROM view\_d\_songs. What was returned?

Result: Return ID, song Title, and artist for all songs with type code 'NEWAGE'.

4. REPLACE view\_d\_songs. Add type\_code to the column list. Use aliases for all columns.

CREATE OR REPLACE VIEW view\_d\_songs AS  
SELECT d AS "Song ID",  
title AS "Song Title",  
artist AS "Artist",  
type\_code AS "Type" FROM d\_songs  
WHERE type\_code = 'NEWAGE';

Or use alias after the CREATE statement as shown.



5. Jason Tsang, the disk jockey for DJs on Demand, needs a list of the past events and those planned for the coming months so he can make arrangements for each event's equipment setup. As the company manager, you do not want him to have access to the price that clients paid for their events. Create a view for Jason to use that displays the name of the event, the event date, and the theme description. Use aliases for each column name.

CREATE OR REPLACE VIEW djvw AS  
 SELECT event\_name, event\_date, theme\_desc  
 FROM events  
 WHERE event\_date >= TO\_DATE('2000-01-01', 'YYYY-MM-DD')  
 GROUP BY event\_name, event\_date, theme\_desc;

6. It is company policy that only upper-level management be allowed access to individual employee salaries. The department managers, however, need to know the minimum, maximum, and average salaries, grouped by department. Use the Oracle database to prepare a view that displays the needed information for department managers.

CREATE OR REPLACE VIEW dept\_mgr\_sal AS  
 SELECT dept\_name, MIN(salary) AS min\_sal, MAX(salary) AS max\_sal, AVG(salary) AS avg\_sal  
 FROM emp  
 GROUP BY dept\_name;