

## EXERCISE 13

### Creating Views

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

1.
  - **Simplified Querying:** Views allow you to write complex queries once and reference them easily, reducing code repetition.
  - **Security Control:** Views restrict access to sensitive columns and rows, enabling users to see only permitted data.
  - **Data Abstraction:** Views present data in a meaningful or business-relevant format, hiding underlying schema complexity.

Create a simple view called view\_d\_songs that contains the ID, title and artist from the DJs on

2.

column.



```
CREATE VIEW view_d_songs AS
SELECT id, title AS "Song Title", artist
FROM DJs_on_Demand
WHERE type_code = 'New Age';
```

View VIEW\_D\_SONGS created.

Elapsed: 00:00:00.011

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

3.

		Download ▾	Execution time: 0.144 seconds	
	ID	SONG TITLE	ARTIST	
1	5	Peaceful Journey	Liam Flow	
2	3	Meditation Waves	Sophie Calm	
3	1	Quiet Reflections	John Serenity	

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

4.

```
CREATE OR REPLACE VIEW view_d_songs AS
SELECT id AS "Song ID", title AS "Song Title", artist AS "Song Artist", type_code
AS "Music Category"
FROM DJs_on_Demand
WHERE type_code = 'New Age';
```

View VIEW\_D\_SONGS created.

Elapsed: 00:00:00.015

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 VIEW view_j_event_list AS
SELECT event_name AS "Event Name",
       event_date AS "Event Date",
       theme_description AS "Theme"
FROM Events;
View VIEW_J_EVENT_LIST created.
Elapsed: 00:00:00.009
```

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 VIEW view_dept_salary_summary AS
SELECT department_id AS "Department",
       MIN(salary) AS "Min Salary",
       MAX(salary) AS "Max Salary",
       AVG(salary) AS "Avg Salary"
FROM employees
GROUP BY department_id;
View VIEW_DEPT_SALARY_SUMMARY created.
Elapsed: 00:00:00.010
```