

## Count, Distinct, NVL

### Objectives

- Construct and execute a SQL query using the COUNT group function
- Use DISTINCT and the NVL function with group functions

### Vocabulary

**Directions: Identify the vocabulary word for each definition below.**

1. \_\_\_\_\_ Returns the number of non-null values in the expression column
2. \_\_\_\_\_ The keyword used to return only nonduplicate values or combinations of nonduplicate values in a query.
3. \_\_\_\_\_ Returns the number of unique non-null values in the expression column.

### Try It / Solve It

1. How many songs are listed in the DJs on Demand D\_SONGS table?
2. In how many different location types has DJs on Demand had venues?
3. The d\_track\_listings table in the DJs on Demand database has a song\_id column and a cd\_number column. How many song IDs are in the table and how many different CD numbers are in the table?
4. How many of the DJs on Demand customers have email addresses?
5. Some of the partners in DJs on Demand do not have authorized expense amounts (auth\_expense\_amt). How many partners do have this privilege?
6. Using the table shown:

ID	type	shoe_color
456	oxford	brown
463	sandal	tan
262	heel	black
433	slipper	tan

What values will  
be returned when the following statement is issued?

```
SELECT COUNT(shoe_color),
```

```
COUNT(DISTINCT shoe_color)
FROM shoes;
```

7. Create a query that will convert any null values in the auth\_expense\_amt column on the DJs on Demand D\_PARTNERS table to 100000 and find the average of the values in this column. Round the result to two decimal places.

Column	ID	NAME	EVENT_DATE	DESCRIPTION	COST
Data type 3	NUMBER	VARCHAR2	DATE	VARCHAR2	NUMBER

8. Which statement(s) is/are True about the following SQL statement:

```
SELECT AVG(NVL(selling_bonus, 0.10))
```

```
FROM bonuses;
```

\_\_\_\_\_a. The data types of the values in the NVL clause can be any data type except date data.

\_\_\_\_\_b. If the selling\_bonus column has a null value, 0.10 will be substituted.

\_\_\_\_\_c. There will be no null values in the selling\_bonus column when the average is calculated.

\_\_\_\_\_d. This statement will cause an error. There cannot be two functions in the SELECT statement.

9. Which of the following statements is/are TRUE about the following query?

```
SELECT DISTINCT colors, sizes
```

```
FROM items;
```

\_\_\_\_\_a. Each color will appear only once in the results set.

\_\_\_\_\_b. Each size will appear only once in the results set.

\_\_\_\_\_c. Unique combinations of color and size will appear only once in the results set.

\_\_\_\_\_d. Each color and size combination will appear more than once in the results set.