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Vocabulary

Identify the vocabulary word for each definition below:

DELETE	Statement used to remove existing rows in a table.
INSERT	Statement used to add new rows to a table.
MERGE	Statement used to INSERT and/or UPDATE a target table, based on matching values in a source table.
UPDATE	Statement used to modify existing rows in a table.
DDL	When you create, change, or delete an object in a database.
DML	When you change data in an object (for example, by inserting or deleting rows).

Try It / Solve It

1. Evaluate the following SQL statement.
   DELETE FROM students;
   This SQL statement will:
   A. Not execute due to wrong syntax
   B. Delete the first row from STUDENTS
   C. Delete all rows from STUDENTS
   D. None of the above

2. Evaluate the following SQL statement.
   INSERT INTO STUDENTS (id, last_name, first_name)
   VALUE (29,'Perez','Jessica');
   This SQL statement:
   A. Does an explicit insert
   B. Does an implicit insert

Use the following table for questions 3 through 8.

grocery_items		
product_id	**brand**	**description**
110	Colgate	Toothpaste
111	Ivory	Soap
112	Heinz	Ketchup

3. Write a SQL statement to create the above table.
   Answer :

```sql
create table grocery_items(
    product_id number(3,0) primary key,
    brand varchar2(20),
    description varchar2(50)
    );
```

Script Output ✕ | ▷ Query Result ✕ | Script Output 1
📌 ⬦ 🖫 🖨 ▤ | Task completed in 0.036 seconds
Table GROCERY_ITEMS created.

4. Write and execute three SQL statements to explicitly add the above data to the table.
   Answer :

```sql
insert into grocery_items(product_id, brand, description) values (110,'Colgate','Toothpaste');
insert into grocery_items(product_id, brand, description) values (111,'Ivory','Soap');
insert into grocery_items(product_id, brand, description) values (112,'Heinz','Ketchup');
```

Script Output ✕
📌 ⬦ 🖫 🖨 ▤ | Task completed in 0.009 seconds
1 row inserted.

1 row inserted.

1 row inserted.

5. Write and execute a SQL statement that will explicitly add your favorite beverage to the table.
   Answer :

```sql
insert into grocery_items(product_id, brand, description) values (113,'Milo','Milk');
```

Script Output ✕
📌 ⬦ 🖫 🖨 ▤ | Task completed in 0.005 seconds
1 row inserted.

6. Write and execute a SQL statement that modifies the description for Heinz ketchup to "tomato catsup".
   Answer :

```sql
update grocery_items
    set description = 'tomato catsup'
    where product_id = 112;
```

Script Output ✕
📌 ⬦ 🖫 🖨 ▤ | Task completed in 0.001 seconds
1 row updated.

7. Write and execute a SQL statement that will implicitly add your favorite candy to the table.
   Answer :

```sql
insert into grocery_items values (114,'Burger King','Burger');
```

Script Output ✕ | ▷ Query Result ✕ | Script Output 1 ✕
📌 ⬦ 🖫 🖨 ▤ | Task completed in 0.004 seconds
1 row inserted.

8. Write and execute a SQL statement that changes the soap brand from "Ivory" to "Dove."
   Answer :

```
update grocery_items
  set brand = 'Dove'
  where product_id = 111;
```

Script Output × Query Result × Script Ou

Task completed in 0.002 seco

1 row updated.

Use the following table for questions 9 through 14.

new_items		
product_id	**brand**	**description**
110	Colgate	Dental paste
175	Dew	Soda
275	Palmolive	Dish detergent

9. Write and execute SQL statements to create the new_items table and populate it with the data in the table.
   Answer :

```
create table new_items(
   product_id number(3,0) primary key,
   brand varchar2(20),
   description varchar2(50)
   );
insert into new_items(product_id, brand, description) values (110,'Colgate','Dental paste');
insert into new_items(product_id, brand, description) values (175,'Dew','Soda');
insert into new_items(product_id, brand, description) values (275,'Palmolive','Dish detergent');
```

Script Output × Query Result × Script Output 1 × Query Result 1 ×

Task completed in 0.008 seconds

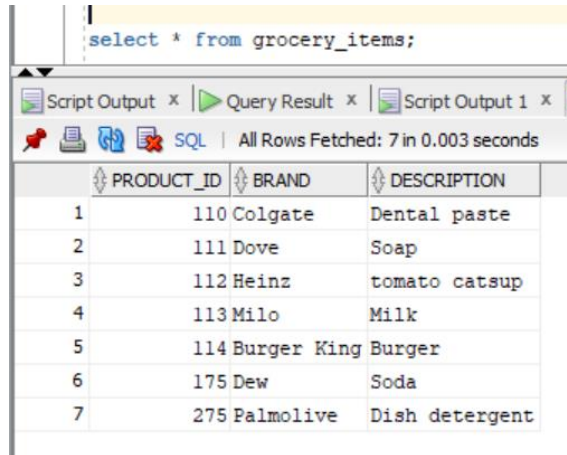Table NEW_ITEMS created.

1 row inserted.

1 row inserted.

1 row inserted.

10. Write a SQL statement that will update the grocery_items table with the brand and description from the new_items table when the product ID values match. If they don't match, add a new row to the grocery_items table. DO NOT EXECUTE YOUR STATEMENT YET.
    Answer :

```
merge into grocery_items g
  using new_items n
  on (g.product_id = n.product_id)
  when matched then
   update set
     g.brand = n.brand,
     g.description = n.description
  when not matched then
   insert values(n.product_id, n.brand, n.description);
```

11. How many rows will be updated by the SQL statement in question 10?
    Answer : 1

12. How many rows will be inserted by the SQL statement in question 10?
    Answer : 2

13. Which of the following is true about the SQL statement in question 10?
    A.   new_items is the source table and grocery_items is the target table.
    B.   grocery_items is the source table and new_items is the target table.

14. Execute the SQL statement you wrote in question 10, and then SELECT all data from the grocery_items
    table to verify your answers to questions 11 and 12.
    Answer :

```
select * from grocery_items;
```

Script Output × | ▷ Query Result × | Script Output 1 ×

SQL | All Rows Fetched: 7 in 0.003 seconds

	PRODUCT_ID	BRAND	DESCRIPTION
1	110	Colgate	Dental paste
2	111	Dove	Soap
3	112	Heinz	tomato catsup
4	113	Milo	Milk
5	114	Burger King	Burger
6	175	Dew	Soda
7	275	Palmolive	Dish detergent