15-2: DML Operations and Views

Vocabulary

1.ROWNUM
2.WITH CHECK OPTION (also the delete)
3. WITH READ ONLY

Try It / Solve It

1.

```
SELECT owner, table_name, column_name, updatable,insertable, deletable
FROM user_updatable_columns WHERE LOWER(table_name) = 'copy_d_songs';


SELECT owner, table_name, column_name, updatable,insertable, deletable
FROM user_updatable_columns WHERE LOWER(table_name) = 'copy_d_events';


SELECT owner, table_name, column_name, updatable,insertable, deletable
FROM user_updatable_columns WHERE LOWER(table_name) = 'copy_d_cds';


SELECT owner, table_name, column_name, updatable,insertable, deletable
FROM user_updatable_columns WHERE LOWER(table_name) = 'copy_d_clients'
```

2.

```
CREATE OR REPLACE VIEW view_copy_d_songs  AS
SELECT *
FROM copy_d_songs;
```

3.

```
INSERT INTO view_copy_d_songs(id,title,duration,artist,type_code)
VALUES(88,'Mello Jello','2 min','The What',4);
```

4.

```
CREATE OR REPLACE VIEW read_copy_d_cds  AS
SELECT *
FROM copy_d_cds
WHERE year = '2000'
WITH READ ONLY ;
```

5.
ORA-42399: cannot perform a DML operation on a read-only view

6.
```
CREATE OR REPLACE VIEW read_copy_d_cds  AS
SELECT *
FROM copy_d_cds
WHERE year = '2000'
WITH CHECK OPTION CONSTRAINT ck_read_copy_d_cds;
```

7.
```
DELETE FROM read_copy_d_cds
WHERE year = '2000';
```

8.
```
DELETE FROM read_copy_d_cds
WHERE cd_number = 90;
```

9.
```
DELETE FROM read_copy_d_cds
WHERE year = ‘2001';
```

10.
Only the one in problem 7 above, not the one in 8 and 9

11.
For simple views, all DML’s are OK, but for complex views:
Delete restricted if it contains:
Group functions
GROUP BY CLAUSE
DISTINCT
pseudocolumn ROWNUM Keyword

Modify restricted if it contains:
Group functions
GROUP BY CLAUSE
DISTINCT
pseudocolumn ROWNUM Keyword
Column defined by expressions

INSERT restricted if it contains:
Group functions
GROUP BY CLAUSE
DISTINCT
pseudocolumn ROWNUM Keyword
Column defined by expressions
Does not include NOT NULL columns in the base table.

12.
It roughly predicted that computing power nearly doubles every year. But Moore also said in 2005 that as per nature of exponential functions, this trend may not continue forever.

13.
Is the hypothesis that the invention of artificial superintelligence will abruptly trigger runaway technological growth, resulting in unfathomable changes to human civilization.
<u>3 Reasons To Believe The Singularity Is Near as per Greg Satell on Forbes:</u>

- We're Going Beyond Moore's Law
- Robots Are Doing Human Jobs
- We're Editing Genes