

## Homework assignment 7

### Multiple choice questions

1. Which of the following is a correct statement?

- a. A commit is issued implicitly when a user exits SQL Developer or SQL\*Plus.
- b. A commit is issued implicitly when a DDL command is executed.
- c. A commit is issued automatically when a DML command is executed.
- d. All of the above are correct.
- e. Both a and b are correct.
- f. Both a and c are correct.

2. Which of the following is a valid SQL statement?

- a. `SELECT * WHERE amid = 'J100' FOR UPDATE;`
- b. `INSERT INTO homework10 VALUES (SELECT * FROM acctmanager);`
- c. `DELETE amid FROM acctmanager;`
- d. `rollback;`
- e. all of the above

3. Which of the following commands can be used to add rows to a table?

- a. `INSERT INTO`
- b. `ALTER TABLE ... ADD`
- c. `UPDATE`
- d. `SELECT ... FOR UPDATE`

4. Which of the following statements deletes all rows in the HOMEWORK10 table?

- a. `DELETE * FROM homework10;`
- b. `DELETE ** FROM homework10;`
- c. `DELETE FROM homework10;`
- d. `DELETE FROM homework10 WHERE amid = '*';`
- e. Both c and d delete all rows in the HOMEWORK10 table.

5. Which of the following statements places a shared lock on at least a portion of a table named HOMEWORK10?

- a. SELECT \* FROM homework10 WHERE col2 IS NULL FOR UPDATE;
- b. INSERT INTO homework10 (col1, col2, col3) VALUES ('A', 'B', 'C');
- c. UPDATE homework10 SET col3 = NULL WHERE col1 = 'A';
- d. UPDATE homework10 SET col3 = LOWER (col3) WHERE col1 = 'A';
- e. all of the above

6. Assuming the HOMEWORK10 table has three columns (Col1, Col2, and Col3, in this order), which of the following commands stores a NULL value in Col3 of the HOMEWORK10 table?

- a. INSERT INTO homework10 VALUES ('A', 'B', 'C');
- b. INSERT INTO homework10 (col3, col1, col2) VALUES (NULL, 'A', 'B');
- c. INSERT INTO homework10 VALUES (NULL, 'A', 'B');
- d. UPDATE homework10 SET col1 = col3;

7. Which of the following symbols designates a substitution variable?

- a. &
- b. \$
- c. #
- d. –

8. Which of the following input values results in a successful INSERT of O'hara?

- a. 'O^hara'
- b. 'O' 'hara' (two single quotes following the O)
- c. 'O"hara' (a double quote following the O)
- d. Data values can't contain quotes.

9. Which of the following commands locks the HOMEWORK10 table in EXCLUSIVE mode?

- a. LOCK TABLE homework10 EXCLUSIVELY;
- b. LOCK TABLE homework10 IN EXCLUSIVE MODE;
- c. LOCK TABLE homework10 TO OTHER USERS;
- d. LOCK homework10 IN EXCLUSIVE MODE;
- e. Both b and d lock the table in EXCLUSIVE mode.

10. You issue the following command: INSERT INTO homework10 (col1, col2, col3) VALUES

('A', NULL, 'C'). The command will fail if which of the following statements is true?

- a. Col1 has a PRIMARY KEY constraint enabled.
- b. Col2 has a UNIQUE constraint enabled.
- c. Col3 is defined as a DATE column.
- d. None of the above would cause the command to fail.

11. Which of the following releases a lock currently held by a user on the HOMEWORK10 table?

- a. A COMMIT command is issued.
- b. A DDL command is issued to end a transaction.
- c. The user exits the system.
- d. A ROLLBACK command is issued.
- e. all of the above
- f. none of the above

12. Assume you have added eight new orders to the ORDERS table. Which of the following is true?

- a. Other users can view the new orders as soon as you execute the INSERT INTO command.
- b. Other users can view the new orders as soon as you issue a ROLLBACK command.
- c. Other users can view the new orders as soon as you exit the system or execute a COMMIT command.
- d. Other users can view the new orders only if they place an exclusive lock on the table.

13. Which of the following commands removes all orders placed before April 1, 2009?

- a. DELETE FROM orders WHERE orderdate < '01-APR-09';
- b. DROP FROM orders WHERE orderdate < '01-APR-09';
- c. REMOVE FROM orders WHERE orderdate < '01-APR-09';
- d. DELETE FROM orders WHERE orderdate > '01-APR-09';

14. How many rows can be added to a table by executing the INSERT INTO ... VALUES command?

- a. 1
- b. 2

c. 3

d. unlimited

15. You accidentally deleted all the orders in the ORDERS table. How can the error be corrected after a COMMIT command has been issued?

a. ROLLBACK;

b. ROLLBACK COMMIT;

c. REGENERATE RECORDS orders;

d. None of the above restores the deleted orders.

#### Advance Challenge

Currently, the contents of the Category column in the BOOKS table are the actual name for each category. This structure presents a problem if one user enters COMPUTER for the Computer category and another user enters COMPUTERS. To avoid this and other problems that might occur, the database designers have decided to create a CATEGORY table containing a code and description for each category. The structure for the CATEGORY table should be as follows:

Column Name	Datatype	Width	Constraints
CATCODE	VARCHAR2	3	PRIMARY KEY
CATDESC	VARCHAR2	11	NOT NULL

The data for the CATEGORY table is as follows:

CATCODE	CATDESC
BUS	BUSINESS
CHN	CHILDREN
COK	COOKING
COM	COMPUTER
FAL	FAMILY LIFE
FIT	FITNESS
SEH	SELF HELP
LIT	LITERATURE

Required:

- Create the CATEGORY table and populate it with the given data. Save the changes permanently.
- Add a column to the BOOKS table called Catcode.
- Add a FOREIGN KEY constraint that requires all category codes entered in the BOOKS table to already exist in the CATEGORY table. Set the Catcode values for the existing rows in the BOOKS table, based on each book's current Category value.
- Verify that the correct categories have been assigned in the BOOKS table, and save the changes permanently.
- Delete the Category column from the BOOKS table.