Chapter 01: Basic SQL Select Statement

**1.** Evaluate the following SQL statement:

SELECT product\_name || 'it's not available for order' FROM product\_information

WHERE product\_status = 'obsolete';

You received the following error while executing the above query: ERROR:

ORA-01756: quoted string not properly terminated

What would you do to execute the query successfully?

A. Enclose the character literal string in the SELECT clause within the double quotation marks.

B. Do not enclose the character literal string in the SELECT clause within the single quotation marks.

C. Use Quote (q) operator and delimiter to allow the use of single quotation mark in the literal character string.

D. Use escape character to negate the single quotation mark inside the literal character string in the SELECT clause.

**Answer: C**

**2.** You want to display the expiration date of the warranty for a product. Which SQL statement would you execute?

A. SELECT product\_id, SYSDATE + warranty\_period FROM product\_information;

B. SELECT product\_id, TO\_YMINTERVAL(warranty\_period) FROM product\_information;

C. SELECT product\_id, TO\_YMINTERVAL(SYSDATE) + warranty\_period FROM product\_information;

D. SELECT product\_id, TO\_YMINTERVAL(SYSDATE + warranty\_period) FROM product\_information;

**Answer: A**

**3.** View and examine the description of the EMPLOYEES table.

Your company wants to give 5% bonus to all the employees on their annual salary. The SALARY column stores the monthly salary for an employee. To check the total for annual salary and bonus amount for each employee, you issued the following SQL statement:

SELECT first\_name, salary, salary\*12+salary\*12\*.05 "ANNUAL SALARY + BONUS" FROM employees;

Which statement is true regarding the above query?

A. It would execute and give you the desired output.

B. It would not execute because the AS keyword is missing between the column name and the alias.

C. It would not execute because double quotation marks are used instead of single quotation marks for assigning alias for the third column.

D. It would execute but the result for the third column would be inaccurate because the parentheses for overriding the precedence of the operator are missing.

**Answer: A**

**4.** View the Exhibit and examine the description of the EMPLOYEES table.

Your company decided to give a monthly bonus of $50 to all the employees who have completed five years in the company. The following statement is written to display the LAST\_NAME, DEPARTMENT\_ID, and the total annual salary:

SELECT last\_name, department\_id, salary+50\*12 "Annual Compensation" FROM employees

WHERE MONTHS\_BETWEEN(SYSDATE, hire\_date)/12 >= 5;

When you execute the statement, the "Annual Compensation" is not computed correctly. What changes would you make to the query to calculate the annual compensation correctly?

A. Change the SELECT clause to SELECT last\_name, department\_id, salary\*12+50 "Annual Compensation".

B. Change the SELECT clause to SELECT last\_name, department\_id, salary+(50\*12) "Annual Compensation".

C. Change the SELECT clause to SELECT last\_name, department\_id, (salary+50)\*12 "Annual Compensation".

D. Change the SELECT clause to SELECT last\_name, department\_id, (salary\*12)+50 "Annual Compensation".

**Answer: C**

5. You want to create report to show different jobs in each department. You do not want to display any duplicate roles in the report.

Which SELECT statement do you use to create the report?

A. SELECT deptno, job FROM emp;

B. SELECT no duplicate deptno, job FROM emp;

C. SELECT distinct deptno, job FROM emp;

D. CREATE report DISPLAY deptno, job FROM emp;

E. SELECT distinct deptno, distinct job FROM emp;

Answer: C

6. When selecting data which statement is valid about projection?

A. Projection allows due to choose rows.

B. Projection allows due to choose columns.

C. Projection allows due to joined tables together.

D. Projection allows due to add columns to a table.

Answer: B

7. Which SQL statement generates the alias Annual Salary for the calculated column SALARY\*12?

A. SELECT ename, salary\*12 ‘Annual Salary’ FROM employees;

B. SELECT ename, salary\*12 “Annual Salary” FROM employees;

C. SELECT ename, salary\*12 AS Annual Salary FROM employees;

D. SELECT ename, salary\*12 AS INITCAP (“ANNUAL SALARY”) FROM employees

Answer: B

8. Which of the following correctly describes how to specify a column alias?

A. Place the alias at the beginning of the statement to describe the table.

B. Place the alias after each column, separated by white space, to describe the column.

C. Place the alias after each column, separated by a comma, to describe the column.

D. Place the alias at the end of the statement to describe the table.

Answer: B

Chapter 02: Restricting & Sorting Data

**1.** You want to see the product names and the date of expiration of warranty for all the products, if the product is purchased today. The products that have no warranty should be displayed at the top and the products with maximum warranty period should be displayed at the bottom.

Which SQL statement would you execute to fulfill this requirement?

A. SELECT product\_name, category\_id, SYSDATE+warranty\_period AS "Warranty expire date" FROM product\_information ORDER BY SYSDATE-warranty\_period;

B. SELECT product\_name, category\_id, SYSDATE+warranty\_period AS "Warranty expire date" FROM product\_information ORDER BY SYSDATE+warranty\_period;

C. SELECT product\_name, category\_id, SYSDATE+warranty\_period AS "Warranty expire date" FROM product\_information ORDER BY SYSDATE;

D. SELECT product\_name, category\_id, SYSDATE+warranty\_period "Warranty expire date" FROM product\_information WHERE warranty\_period >SYSDATE;

**Answer: B**

**2.** View the Exhibit and examine the data in the PRODUCT\_INFORMATION table.

There are some products listed in the PRODUCT\_INFORMATION table that have no value in the LIST\_PRICE column. You issued the following SQL statement to find out the PRODUCT\_NAME for these products:

SELECT product\_name, list\_price FROM product\_information WHERE list\_price = NULL;

The query returns no rows. What changes would you make in the statement to get the desired result?

A. Change the WHERE clause to WHERE list\_price = 0

B. Change the WHERE clause to WHERE list\_price = ' '.

C. Change the WHERE clause to WHERE list\_price IS NULL.

D. In the WHERE clause, enclose NULL within single quotation marks.

E. In the WHERE clause, enclose NULL within double quotation marks.

**Answer: C**

**3.** View the Exhibit and examine the details of the PRODUCT\_INFORMATION table.

You have the requirement to display PRODUCT\_NAME and LIST\_PRICE from the table where the CATEGORY\_ID column has values 12 or 13, and the SUPPLIER\_ID column has the value

102088. You executed the following SQL statement:

SELECT product\_name, list\_price

FROM product\_information

WHERE (category\_id = 12 AND category\_id = 13)

AND supplier\_id = 102088;

Which statement is true regarding the execution of the query?

A. It would execute but the output would return no rows.

B. It would execute and the output would display the desired result.

C. It would not execute because the entire WHERE clause condition is not enclosed within the parentheses.

D. It would not execute because the same column has been used in both sides of the AND logical operator to form the condition.

**Answer: A**

**4.** View the Exhibit and examine the data in the DEPARTMENTS tables.

Evaluate the following SQL statement:

SELECT department\_id "DEPT\_ID", department\_name , 'b' FROM departments

WHERE department\_id=90

UNION

SELECT department\_id, department\_name DEPT\_NAME, 'a' FROM departments

WHERE department\_id=10

Which two ORDER BY clauses can be used to sort the output of the above statement? (Choose two.)

A. ORDER BY 3;

B. ORDER BY 'b';

C. ORDER BY DEPT\_ID;

D. ORDER BY DEPT\_NAME;

**Answer: A, C**

**5.** View the Exhibit and examine the description of the PRODUCT\_INFORMATION table.

SELECT product\_name, list\_price, min\_price, list\_price - min\_price Difference

FROM product\_information

Which options when used with the above SQL statement can produce the sorted output in ascending order of the price difference between LIST\_PRICE and MIN\_PRICE? (Choose all that apply.)

A. ORDER BY 4

B. ORDER BY MIN\_PRICE

C. ORDER BY DIFFERENCE

D. ORDER BY LIST\_PRICE

E. ORDER BY LIST\_PRICE - MIN\_PRICE

**Answer: A, C, E**

6. You want of display the details or all employees whose last names is Smith. But you are not sure in which case last names are stored.

Which statement will list all the employees whose last name is Smith?

A. Select last name, first name FROM emp WHERE last name = ‘smith’;

B. Select last name, first name FROM emp WHERE UPPER (last name) = ‘smith’;

C. Select last name, first name FROM emp WHERE last name = UPPER (‘smith’);

D. Select last name, first name FROM emp WHERE LOWER (last name) = ‘smith’;

Answer: D

7. Which statement about SQL is true?

A. Null values are displayed last in the ascending sequences.

B. Data values are displayed in descending order by default.

C. You cannot specify a column alias in an ORDER BY clause.

D. You cannot sort query results by a column that is not included in the SELECT list.

E. The results are sorted by the first column in the SELECT list, if the ORDER BY clause is not provided.

Answer: A

8. For which two tasks would you use the where clause?

A. Compare two values.

B. Display only unique data.

C. Designate a table location.

D. Restrict the rows displayed.

Answer: A, D, F

9. You need to retrieve the employee names and salaries from emp tables assorted by the salary in descending order. If two names match for a salary then two names must be displayed in alphabetical order.

Which statement produces the required results?

A. SELECT ename,sal FROM emp ORDER BY ename,sal;

B. SELECT ename,sal FROM emp ORDER BY sal,ename;

C. SELECT ename,sal FROM emp SORT BY sal DESC,ename;

D. SELECT ename,sal FROM emp ORDER BY sal DESC,ename;

E. SELECT ename,sal FROM emp ORDER BY sal DESC,ename ASCENDING;

Answer: D

10. Which two statements true regarding the ORDER BY clause? (Choose two)

A. The sort is in ascending order by default.

B. The sort is in descending order by default.

C. The ORDER BY clause must precede the WHERE clause.

D. The ORDER BY clause is executed on the client side.

E. The ORDER BY clause comes last in the SELECT statement.

F. The ORDER BY clause is executed first in the query execution.

Answer: A, E

11. You need to display the last names of those employees who have the letter “A” as the second character in their names.

Which SQL statement displays the required results?

A. SELECT last\_name FROM EMP WHERE last\_name LIKE ‘\_A%’;

B. SELECT last\_name FROM EMP WHERE last name =’\*A%’

C. SELECT last\_name FROM EMP WHERE last name =’\_A%’;

D. SELECT last\_name FROM EMP WHERE last name LIKE ‘\*A%’

Answer: A

12. Which of the following keywords are used in ORDER BY clauses? (Choose two)

A. ABS

B. ASC

C. DESC

D. DISC

Answer: B, C

Chapter 03: Single Row Functions

**1.** Which three statements are true regarding single-row functions? (Choose three.)

A. They can accept only one argument.

B. They can be nested up to only two levels.

C. They can return multiple values of more than one data type.

D. They can be used in SELECT, WHERE, and ORDER BY clauses. E. They can modify the data type of the argument that is referenced.

F. They can accept a column name, expression, variable name, or a user-supplied constant as arguments.

**Answer: D, E, F**

**2.** View the Exhibit and examine the description of the EMPLOYEES table.

You want to calculate the total remuneration for each employee. Total remuneration is the sum of the annual salary and the percentage commission earned for a year. Only a few employees earn commission.

Which SQL statement would you execute to get the desired output?

A. SELECT first\_name, salary, salary\*12+salary\*commission\_pct "Total" FROM EMPLOYEES;

B. SELECT first\_name, salary, salary\*12+NVL((salary\*commission\_pct), 0) "Total" FROM EMPLOYEES;

C. SELECT first\_name, salary, salary\*12 + NVL(salary, 0)\*commission\_pct "Total" FROM EMPLOYEES;

D. SELECT first\_name, salary, salary\*12+(salary\*NVL2(commission\_pct, salary,salary+commission\_pct))"Total" FROM EMPLOYEES;

**Answer: B**

**3.** Given below is a list of functions and their purpose in random order.

Function Purpose

1)NVL a) Used for evaluating NOT NULL and NULL values

2)NULLIF b) Used to return the first non- null values in a list of expressions

3)COALESCE c) Used to compare two expressions. If both are same, it returns NULL; otherwise, it returns only the first expression.

4)NVL2 d) Used to convert NULL values to actual values Identify the correct combination of functions and their usage.

A. 1-a, 2-c, 3-b, 4-d

B. 1-d, 2-c, 3-b, 4-a

C. 1-b, 2-c, 3-d, 4-a

D. 1-d, 2-b, 3-c, 4-a

**Answer: B**

**4.** View the Exhibit and examine the details of the PRODUCT\_INFORMATION table.

Evaluate the following SQL statement: SELECT TO\_CHAR(list\_price,'$9,999') FROM product\_information;

Which two statements would be true regarding the output for this SQL statement? (Choose two.)

A. The LIST\_PRICE column having value 1123.90 would be displayed as $1,124.

B. The LIST\_PRICE column having value 1123.90 would be displayed as $1,123.

C. The LIST\_PRICE column having value 11235.90 would be displayed as $1,123.

D. The LIST\_PRICE column having value 11235.90 would be displayed as #######.

**Answer: A, D**

**5.** View the Exhibit and examine the description of the EMPLOYEES table.

Evaluate the following SQL statement:

SELECT first\_name, employee\_id, NEXT\_DAY(ADD\_MONTHS(hire\_date, 6), 1) "Review" FROM employees;

The query was written to retrieve the FIRST\_NAME, EMPLOYEE\_ID, and review date for employees.

The review date is the first Monday after the completion of six months of the hiring. The

NLS\_TERRITORY parameter is set to AMERICA in the session. Which statement is true regarding this query?

A. The query would execute to give the desired output.

B. The query would not execute because date functions cannot be nested.

C. The query would execute but the output would give review dates that are Sundays.

D. The query would not execute because the NEXT\_DAY function accepts a string as argument.

**Answer: C**

**6.** View the Exhibit and examine the description of the ORDERS table.

Which two WHERE clause conditions demonstrate the correct usage of conversion functions?

(Choose two.)

A. WHERE order\_date > TO\_DATE('JUL 10 2006','MON DD YYYY')

B. WHERE TO\_CHAR(order\_date,'MON DD YYYY') = 'JAN 20 2003'

C. WHERE order\_date > TO\_CHAR(ADD\_MONTHS(SYSDATE,6),'MON DD YYYY')

D. WHERE order\_date IN ( TO\_DATE('Oct 21 2003','Mon DD YYYY'), TO\_CHAR('NOV 21

2003','Mon DD YYYY') )

**Answer: A, B**

**7.** Given below is a list of functions and the tasks performed by using these functions, in random order.

Function Usage

1) LPAD a) Used to truncate a column, expression, or value to n decimal places

2) TRUNC b) Used to remove heading or trailing or both characters from the character string

3) DECODE c) Pads the character value right-justified to a total width of n character positions

4) TRIM d) Used to return the numeric value for position of a named character from the character string

5) INSTR e) Used to translate an expression after comparing it with each search value

Which option correctly matches the function names with their usage?

A. 1-c, 2-b, 3-e, 4-a, 5-d

B. 1-e, 2-b, 3-c, 4-a, 5-d

C. 1-e, 2-a, 3-c, 4-d, 5-b

D. 1-c, 2-a, 3-e, 4-b, 5-d

**Answer: D**

8. Which of the following correctly shows the correct use of the TRUNC command on a date?

1. SELECT TRUNC(TO\_DATE(12-Feb-99,DD-MON-YY, 'YEAR')) "Date " FROM DUAL;
2. TRUNC = TO\_DATE('12-Feb-99','DD-MON-YY'), 'YEAR', "Date " FROM DUAL;
3. SELECT TRUNC(TO\_DATE('12-Feb-99','DD-MON-YY'), 'YEAR') "Date " FROM DUAL;
4. date = TRUNC(TO\_DATE('12-Feb-99','DD-MON-YY'), 'YEAR') "Date " FROM DUAL

Answer: C

9. Which of the following SQL statements can calculate and return the absolute value of -33?

1. SELECT ABS("-33") Absolute FROM DUAL;
2. SELECT ABS('-33') "Absolute" FROM DUAL;
3. SELECT ABS(-33) "Absolute" FROM DUAL;
4. SELECT ABS(-33), Absolute FROM DUAL;

Answer: C

10. You would like to display the system date in the format "Monday, 01 June, 2001". Which SELECT statement should you use?

1. SELECT TO\_DATE (SYSDATE, 'FMDAY, DD Month, YYYY') FROM dual;
2. SELECT TO\_CHAR (SYSDATE, 'FMDD, DY Month, YYYY') FROM dual;
3. SELECT TO\_CHAR (SYSDATE, 'FMDay, DD Month, YYYY') FROM dual;
4. SELECT TO\_CHAR (SYSDATE, 'FMDY, DDD Month, YYYY') FROM dual;
5. SELECT TO\_DATE (SYSDATE, 'FMDY, DDD Month, YYYY') FROM dual;

Answer: C

11. Which SELECT statement should you use to extract the year from the system date and display it in the format "1998"?

1. SELECT TO\_CHAR(SYSDATE, 'yyyy') FROM dual;
2. SELECT TO\_DATE(SYSDATE, 'yyyy') FROM dual;
3. SELECT DECODE(SUBSTR(SYSDATE, 8), 'YYYY') FROM dual;
4. SELECT DECODE(SUBSTR(SYSDATE, 8), 'year') FROM dual;
5. SELECT TO\_CHAR(SUBSTR(SYSDATE, 8,2),'yyyy') FROM dual;

Answer: A

12. Evaluate the SQL statement:

SELECT ROUND (45.953, -1), TRUNC (45.936, 2) FROM dual;

Which values are displayed?

1. 46 and 45
2. 46 and 45.93
3. 50 and 45.93
4. 50 and 45.9

Answer: C

13. Which two tasks can you perform using only the TO\_CHAR function? (Choose two.)

1. convert 10 to 'TEN'
2. convert '10' to 10
3. convert 10 to '10'
4. convert 'TEN' to 10
5. convert a date to a character expression
6. convert a character expression to a date

Answer: C, E

14. Which are types of functions available in SQL? (Choose 2)

1. string
2. character
3. integer
4. numeric

Answer: B, D

**Chapter 04: Aggregating Data using Group Functions**

**1.** Which three statements are true regarding the WHERE and HAVING clauses in a SQL statement? (Choose three.)

A. The HAVING clause conditions can have aggregate functions.

B. The HAVING clause conditions can use aliases for the columns.

C. WHERE and HAVING clauses cannot be used together in a SQL statement.

D. The WHERE clause is used to exclude rows before the grouping of data.

E. The HAVING clause is used to exclude one or more aggregated results after grouping data.

**Answer: A, D, E**

**2.** Which three statements are true regarding group functions? (Choose three.)

A. They can be used on columns or expressions.

B. They can be passed as an argument to another group function.

C. They can be used only with a SQL statement that has the GROUP BY clause.

D. They can be used on only one column in the SELECT clause of a SQL statement.

E. They can be used along with the single-row function in the SELECT clause of a SQL statement.

**Answer: A, B, E**

**3.** View the Exhibit and examine the description of the ORDERS table.

Your manager asked you to get the SALES\_REP\_ID and the total numbers of orders placed by each of the sales representatives. Which statement would provide the desired result?

A. SELECT sales\_rep\_id, COUNT(order\_id) total\_orders

FROM orders

GROUP BY sales\_rep\_id;

B. SELECT sales\_rep\_id, COUNT(order\_id) total\_orders

FROM orders

GROUP BY sales\_rep\_id, total\_orders;

C. SELECT sales\_rep\_id, COUNT(order\_id) total\_orders

FROM orders;

D. SELECT sales\_rep\_id, COUNT(order\_id) total\_orders

FROM orders

WHERE sales\_rep\_id IS NOT NULL;

**Answer: A**

**4.** Which two statements are true regarding the GROUP BY clause in a SQL statement? (Choose two.)

A. You can use column alias in the GROUP BY clause.

B. Using the WHERE clause after the GROUP BY clause excludes the rows after creating groups.

C. The GROUP BY clause is mandatory if you are using an aggregate function in the SELECT clause.

D. Using the WHERE clause before the GROUP BY clause excludes the rows before creating groups.

E. If the SELECT clause has an aggregate function, then those individual columns without an aggregate function in the SELECT clause should be included in the GROUP BY clause.

**Answer: D, E**

**5.** View the Exhibit and examine the structure of the PRODUCT\_INFORMATION and INVENTORIES tables.

You want to display the quantity on hand for all the products available in the PRODUCT\_INFORMATION table that have the PRODUCT\_STATUS as 'orderable'. QUANTITY\_ON\_HAND is a column in the INVENTORIES table. The following SQL statement was written to accomplish the task:

SELECT pi.product\_id, pi.product\_status, sum(i.quantity\_on\_hand) FROM product\_information pi LEFT OUTER JOIN inventories i

ON (pi.product\_id = i.product\_id) WHERE (pi.product\_status = 'orderable')

GROUP BY pi.product\_id, pi.product\_status;

Which statement is true regarding the execution of this SQL statement?

A. The statement would execute and produce the desired output.

B. The statement would not execute because the WHERE clause is used before the GROUP BY clause.

C. The statement would not execute because prefixing table alias to column names is not allowed with the ON clause.

D. The statement would not execute because the WHERE clause is not allowed with LEFT OUTER JOIN.

**Answer: A**

6. Which are attributes of single row functions? (Choose all that apply.)

1. cannot be nested
2. manipulate data items
3. act on each row returned
4. return one result per row

Answer: B, C, D

7. What is true of using group functions on columns that contain NULL values?

1. Group functions on columns ignore NULL values.
2. Group functions on columns returning dates include NULL values.
3. Group functions on columns returning numbers include NULL values.
4. Group functions on columns cannot be accurately used on columns that contain NULL values.
5. Group functions on columns include NULL values in calculations if you use the keyword INC\_NULLS.

Answer: A

8. Which two statements are true about WHERE and HAVING clauses? (Choose two.)

1. A WHERE clause can be used to restrict both rows and groups.
2. A WHERE clause can be used to restrict rows only.
3. A HAVING clause can be used to restrict both rows and groups.
4. A HAVING clause can be used to restrict groups only.

Answer: B, D

9. Which clause should you use to exclude group results?

1. WHERE
2. HAVING
3. RESTRICT
4. GROUP BY
5. ORDER BY

Answer: B

10. You need to calculate the total of all salaries in the accounting department. Which group function should you use?

1. MAX
2. MIN
3. SUM
4. COUNT

Answer: C

11. In a SELECT statement that includes a WHERE clause, where is the GROUP BY clause placed statement?

1. immediately after the SELECT clause
2. after the WHERE clause
3. before the FROM clause
4. after the ORDER BY clause

Answer: B

**Chapter 05: Displaying Data from Multiple Tables**

**1.** View the Exhibit and examine the structure of the ORDERS and ORDER\_ITEMS tables.

Evaluate the following SQL statement:

SELECT oi.order\_id, product\_id, order\_date FROM order\_items oi JOIN orders o USING (order\_id);

Which statement is true regarding the execution of this SQL statement?

A. The statement would not execute because table aliases are not allowed in the JOIN clause.

B. The statement would not execute because the table alias prefix is not used in the USING clause.

C. The statement would not execute because all the columns in the SELECT clause are not prefixed with table aliases.

D. The statement would not execute because the column part of the USING clause cannot have a qualifier in the SELECT list.

**Answer: D**

**2.** View the Exhibit and examine the description of the DEPARTMENTS and EMPLOYEES tables.

To retrieve data for all the employees for their EMPLOYEE\_ID, FIRST\_NAME, and

DEPARTMENT

NAME, the following SQL statement was written: SELECT employee\_id, first\_name, department\_name FROM employees

NATURAL JOIN departments;

The desired output is not obtained after executing the above SQL statement. What could be the reason for this?

A. The NATURAL JOIN clause is missing the USING clause.

B. The table prefix is missing for the column names in the SELECT clause.

C. The DEPARTMENTS table is not used before the EMPLOYEES table in the FROM clause.

D. The EMPLOYEES and DEPARTMENTS tables have more than one column with the same column name and data type.

**Answer: D**

**3.** View the Exhibit and examine the description of the EMPLOYEES and DEPARTMENTS tables.

You want to display the LAST\_NAME for the employees, LAST\_NAME for the manager of the employees, and the DEPARTMENT\_NAME for the employees having 100 as MANAGER\_ID. The following SQL statement was written:

SELECT m.last\_name "Manager", e.last\_name "Employee", department\_name "Department" FROM employees m JOIN employees e

ON (m.employee\_id = e.manager\_id) WHERE e.manager\_id=100

JOIN departments d

ON (e.department\_id = d.department\_id);

Which statement is true regarding the output of this SQL statement?

A. The statement would provide the desired results.

B. The statement would not execute because the ON clause is written twice.

C. The statement would not execute because the WHERE clause is wrongly placed.

D. The statement would not execute because the self join uses the ON clause instead of the

USING clause.

**Answer: C**

**4.** View the Exhibit and examine the table structure of DEPARTMENTS and LOCATIONS tables.

You want to display all the cities that have no departments and the departments that have not been allocated cities.

Which type of join between DEPARTMENTS and LOCATIONS tables would produce this information as part of its output?

A. NATURAL JOIN

B. FULL OUTER JOIN

C. LEFT OUTER JOIN

D. RIGHT OUTER JOIN

**Answer: B**

**5.** Which two statements are true regarding the types of table joins available in Oracle Database

10g? (Choose two.)

A. You can use the JOIN clause to join only two tables.

B. You can explicitly provide the join condition with a NATURAL JOIN.

C. You can use the USING clause to join tables on more than one column.

D. You can use the ON clause to specify multiple conditions while joining tables.

**Answer: C, D**

6. To write a query that performs an outer join of tables A and B and returns all rows from B, You need to write

1. any outer join
2. a left outer join
3. a cross join
4. a right outer join
5. an inner join

Answer: D

7. Which is true regarding the use of outer joins?

1. You cannot use IN operator in a condition that involves an outer join.
2. You use (+) on both sides of the WHERE condition to perform an outer join.
3. You use (\*) on both sides of the WHERE condition to perform an outer join.
4. You use an outer join to see only the rows that do not meet the join condition.

Answer: A

8. In which two cases would you use an outer join? (Choose two.)

1. The tables being joined have NOT NULL columns.
2. The tables being joined have only matched data.
3. The columns being joined have NULL values.
4. The tables being joined have only unmatched data.
5. The tables being joined have both matched and unmatched data.
6. Only when the tables have a primary key/foreign key relationship.

Answer: C, E

9. In which case would you use a FULL OUTER JOIN?

1. Both tables have NULL values.
2. You want all unmatched data from one table.
3. You want all matched data from both tables.
4. You want all unmatched data from both tables.

Answer: D

10. In which cases would you use the USING clause? (Choose all that apply.)

1. You want to create a nonequijoin.
2. The tables to be joined have multiple NULL columns.
3. The tables to be joined have columns of the same name and different data types.
4. The tables to be joined have columns with the same name and compatible data types.

Answer: A, D

**Chapter 06: Subqueries**

**Question: 1**

View the Exhibit and examine the description of the EMPLOYEES table.

You want to display the EMPLOYEE\_ID, FIRST\_NAME, and DEPARTMENT\_ID for all the employees who work in the same department and have the same manager as that of the employee having EMPLOYEE\_ID 104. To accomplish the task, you execute the following SQL statement:

SELECT employee\_id, first\_name, department\_id

FROM employees

WHERE (manager\_id, department\_id) =(SELECT department\_id, manager\_id

FROM employees

WHERE employee\_id = 104) AND employee\_id <> 104;

When you execute the statement it does not produce the desired output. What is the reason for this?

A. The WHERE clause condition in the main query is using the = comparison operator, instead of

EXISTS.

B. The WHERE clause condition in the main query is using the = comparison operator, instead of the IN operator.

C. The WHERE clause condition in the main query is using the = comparison operator, instead of the = ANY operator.

D. The columns in the WHERE clause condition of the main query and the columns selected in the subquery should be in the same order.

**Answer: D**

**Question: 2**

Which two statements are true regarding operators used with subqueries? (Choose two.)

A. The NOT IN operator is equivalent to IS NULL.

B. The <ANY operator means less than the maximum.

C. =ANY and =ALL operators have the same functionality.

D. The IN operator cannot be used in single-row subqueries.

E. The NOT operator can be used with IN, ANY and ALL operators.

**Answer: B, E**

**Question: 3**

Which two statements are true regarding multiple-row subqueries? (Choose two.)

A. They can contain group functions.

B. They always contain a subquery within a subquery.

C. They use the < ALL operator to imply less than the maximum.

D. They can be used to retrieve multiple rows from a single table only.

E. They should not be used with the NOT IN operator in the main query if NULL is likely to be a part of the result of the subquery.

**Answer: A, E**

**Question: 4**

View the Exhibit and examine the structure of the EMPLOYEES table

You want to know the FIRST\_NAME and SALARY for all employees who have the same manager as that of the employee with the first name 'Neena' and have salary equal to or greater than that of 'Neena'.

Which SQL statement would give you the desired result?

A. SELECT first\_name, salary

FROM employees

WHERE (manager\_id, salary) >= ALL (SELECT manager\_id, salary

FROM employees

WHERE first\_name = 'Neena' ) AND first\_name <> 'Neena';

B. SELECT first\_name, salary

FROM employees

WHERE (manager\_id, salary) >= (SELECT manager\_id, salary

FROM employees

WHERE first\_name = 'Neena' ) AND first\_name <> 'Neena';

C. SELECT first\_name, salary

FROM employees

WHERE (manager\_id, salary) >= ANY (SELECT manager\_id, salary

FROM employees

WHERE first\_name = 'Neena' ) AND first\_name <> 'Neena';

D. SELECT first\_name, salary

FROM employees

WHERE ( manager\_id = (SELECT manager\_id

FROM employees

WHERE first\_name = 'Neena' ) AND salary >= ( SELECT salary FROM employees

WHERE first\_name = 'Neena' ) ) AND first\_name <> 'Neena';

**Answer: D**

**Question: 5**

View the Exhibit and examine the structure of the ORDERS table.

You have to display ORDER\_ID, ORDER\_DATE, and CUSTOMER\_ID for all those orders that were placed after the last order placed by the customer whose CUSTOMER\_ID is 101.

Which query would give you the desired output?

A. SELECT order\_id, order\_date FROM orders

WHERE order\_date > ALL (SELECT MAX(order\_date) FROM orders ) AND

customer\_id = 101;

B. SELECT order\_id, order\_date FROM orders WHERE order\_date > ANY (SELECT order\_date FROM orders

WHERE customer\_id = 101);

C. SELECT order\_id, order\_date FROM orders WHERE order\_date > ALL (SELECT order\_date FROM orders

WHERE customer\_id = 101);

D. SELECT order\_id, order\_date FROM orders

WHERE order\_date IN (SELECT order\_date

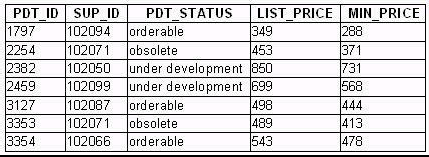
FROM orders

WHERE customer\_id = 101);

**Answer: C**

**Question: 6**

View the Exhibit and examine the data in the PRODUCT\_INFORMATION table.



Which two tasks would require subqueries? (Choose two.)

A. displaying the minimum list price for each product status

B. displaying all supplier IDs whose average list price is more than 500

C. displaying the number of products whose list prices are more than the average list price

D. displaying all the products whose minimum list prices are more than the average list price of products having the product status orderable

E. displaying the total number of products supplied by supplier 102071 and having product status

OBSOLETE

**Answer: C, D**

**Question: 7**

Which two statements are true regarding subqueries? (Choose two.)

A. Only two subqueries can be placed at one level.

B. A subquery can be used to access data from one or more tables or views.

C. If the subquery returns 0 rows, then the value returned by the subquery expression is NULL. D. The columns in a subquery must always be qualified with the name or alias of the table used. E. A subquery in the WHERE clause of a SELECT statement can be nested up to three levels

only.

**Answer: B, C**

**Question: 8**

View the Exhibit and examine the structure of the ORDER\_ITEMS table.

Examine the following SQL statement: SELECT order\_id, product\_id, unit\_price FROM order\_items

WHERE unit\_price = (SELECT MAX(unit\_price) FROM order\_items

GROUP BY order\_id);

You want to display the PRODUCT\_ID of the product that has the highest UNIT\_PRICE per

ORDER\_ID.

What correction should be made in the above SQL statement to achieve this?

A. Replace = with the IN operator.

B. Replace = with the >ANY operator.

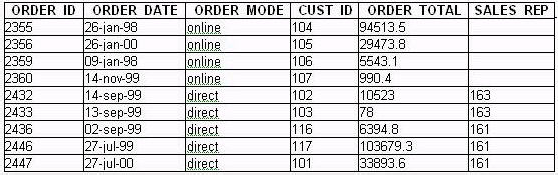
C. Replace = with the >ALL operator.

D. Remove the GROUP BY clause from the subquery and place it in the main query.

**Answer: A**

**Question: 9**

View the Exhibit and examine the structure of the ORDERS table.



Which task would require subqueries?

A. displaying the total order value for sales representatives 161 and 163

B. displaying the order total for sales representative 161 in the year 1999

C. displaying the number of orders that have order mode online and order date in 1999

D. displaying the number of orders whose order total is more than the average order total for all online orders

**Answer: D**

**Question: 10**

A subquery is called a single-row subquery when \_\_\_\_.

A. the inner query returns a single value to the main query

B. the inner query uses an aggregate function and returns one or more values

C. there is only one inner query in the main query and the inner query returns one or more values

D. the inner query returns one or more values and the main query returns a single value as output

**Answer: A**

**Chapter07: Using the Set Operators**

**Question: 1**

View the Exhibit and examine the structure of the EMPLOYEES and DEPARTMENTS tables.

Which SET operator would you use in the blank space in the following SQL statement to list the departments where all the employees have managers?

SELECT department\_id

FROM departments

\_\_\_\_

SELECT department\_id

FROM employees

WHERE manager\_id IS NULL;

A. UNION B. MINUS

C. INTERSECT D. UNION ALL

**Answer: B**

**Question: 2**

View the Exhibit and examine the structure of the LOCATIONS and DEPARTMENTS tables.

Which SET operator should be used in the blank space in the following SQL statement to display the cities that have departments located in them?

SELECT location\_id, city

FROM locations

SELECT location\_id, city

FROM locations JOIN departments

USING(location\_id);

A. UNION

B. MINUS

C. INTERSECT

D. UNION ALL

**Answer: C**

**Question: 3**

View the Exhibit and examine the data in the EMPLOYEES tables.

Evaluate the following SQL statement: SELECT employee\_id, department\_id FROM employees

WHERE department\_id= 50 ORDER BY department\_id

UNION

SELECT employee\_id, department\_id

FROM employees

WHERE department\_id= 90

UNION

SELECT employee\_id, department\_id

FROM employees

WHERE department\_id= 10;

What would be the outcome of the above SQL statement?

A. The statement would execute successfully and display all the rows in the ascending order of

DEPARTMENT\_ID.

B. The statement would execute successfully but it will ignore the ORDER BY clause and display the rows in random order.

C. The statement would not execute because the positional notation instead of the column name should be used with the ORDER BY clause.

D. The statement would not execute because the ORDER BY clause should appear only at the end of the SQL statement, that is, in the last SELECT statement.

**Answer: D**

**Question: 4**

View the Exhibit and examine the structure of the EMPLOYEES and JOB\_HISTORY tables.

The query should display the employee IDs of all the employees who have held the job SA\_MAN

at any time during their tenure.

Choose the correct SET operator to fill in the blank space and complete the following query. SELECT employee\_id

FROM employees

WHERE job\_id = 'SA\_MAN'

\_\_\_\_\_\_\_\_\_\_\_\_ SELECT employee\_id FROM job\_history

WHERE job\_id='SA\_MAN';

A. UNION

B. MINUS

C. INTERSECT

D. UNION ALL

**Answer: A**

**Question: 5**

Evaluate the following SQL statement: SELECT 2 col1,'y' col2

FROM dual UNION SELECT 1,'x' FROM dual UNION

SELECT 3,NULL

FROM dual

ORDER BY 2;

Which statement is true regarding the output of the SQL statement?

A. It would execute and the order of the values in the first column would be 3, 2, 1. B. It would execute and the order of the values in the first column would be 1, 2, 3.

C. It would not execute because the column alias name has not been used in the ORDER BY

clause.

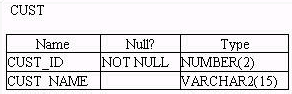
D. It would not execute because the number 2 in the ORDER BY clause would conflict with the value 2 in the first SELECT statement.

**Answer: B**

**Chapter 08: Manipulating Data**

**Question: 1**

View the Exhibit and examine the structure of the CUST table.



Evaluate the following SQL statements executed in the given order: ALTER TABLE cust

ADD CONSTRAINT cust\_id\_pk PRIMARY KEY(cust\_id) DEFERRABLE INITIALLY DEFERRED; INSERT INTO cust VALUES (1,'RAJ'); --row 1

INSERT INTO cust VALUES (1,'SAM'); --row 2

COMMIT;

SET CONSTRAINT cust\_id\_pk IMMEDIATE; INSERT INTO cust VALUES (1,'LATA'); --row 3

INSERT INTO cust VALUES (2,'KING'); --row 4

COMMIT;

Which rows would be made permanent in the CUST table?

A. row 4 only

B. rows 2 and 4

C. rows 3 and 4

D. rows 1 and 4

**Answer: C**

**Question: 2**

Given below are the SQL statements executed in a user session:

CREATE TABLE product

(pcode NUMBER(2), pname VARCHAR2(10));

INSERT INTO product VALUES(1, 'pen'); INSERT INTO product VALUES (2,'pencil'); SAVEPOINT a;

UPDATE product SET pcode = 10 WHERE pcode = 1; SAVEPOINT b;

DELETE FROM product WHERE pcode = 2; COMMIT;

DELETE FROM product WHERE pcode=10; ROLLBACK TO SAVEPOINT a;

Which statement describes the consequences?

A. No SQL statement would be rolled back.

B. Both the DELETE statements would be rolled back.

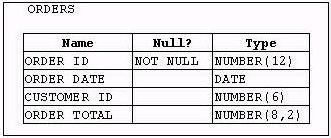
C. Only the second DELETE statement would be rolled back.

D. Both the DELETE statements and the UPDATE statement would be rolled back.

**Answer: A**

**Question: 3**

View the Exhibit and examine the structure of the ORDERS table.



The ORDERS table belongs to the user OE. HR is another user in the database. Evaluate the commands issued by users OE and HR in the following order: Statement 1 by user OE: GRANT SELECT,

UPDATE(customer\_id, order\_total) ON orders

TO hr;

Statement 1 by user HR: SELECT \* FROM oe.orders; Statement 2 by user HR: UPDATE oe.orders

SET order\_total= 10000;

Which statement is true regarding the above commands?

A. Statement 1 by user OE would not work because the statement has to be issued by the DBA. B. Statement 2 by user HR would not work because the grant is only for SELECT in a subquery

of update.

C. There are no errors in the statements issued by OE and HR; all the statements would execute successfully.

D. Statement 1 by user HR would not work because SELECT and UPDATE privileges have been granted only on CUSTOMER\_ID and ORDER\_TOTAL columns.

**Answer: C**

**Question: 4**

View the Exhibit and examine the structure of the ORDERS table.

NEW\_ORDERS is a new table with the columns ORD\_ID, ORD\_DATE, CUST\_ID, and ORD\_TOTAL that have the same data types and size as the corresponding columns in the ORDERS table.

Evaluate the following INSERT statement:

INSERT INTO new\_orders (ord\_id, ord\_date, cust\_id, ord\_total) VALUES(SELECT order\_id,order\_date,customer\_id,order\_total FROM orders

WHERE order\_date > '31-dec-1999'); Why would the INSERT statement fail?

A. because column names in NEW\_ORDERS and ORDERS tables do not match

B. because the VALUES clause cannot be used in an INSERT with a subquery

C. because the WHERE clause cannot be used in a subquery embedded in an INSERT

statement

D. because the total number of columns in the NEW\_ORDERS table does not match the total number of columns in the ORDERS table

**Answer: B**

**Question: 5**

View the Exhibit and examine the structure of the ORDERS table.

Which UPDATE statement is valid?

A. UPDATE orders

SET order\_date = '12-mar-2007', order\_total IS NULL

WHERE order\_id = 2455;

B. UPDATE orders

SET order\_date = '12-mar-2007', order\_total = NULL

WHERE order\_id = 2455;

C. UPDATE orders

SET order\_date = '12-mar-2007'

AND order\_total = TO\_NUMBER(NULL) WHERE order\_id = 2455;

D. UPDATE orders

SET order\_date = TO\_DATE('12-mar-2007','dd-mon-yyyy'), SET order\_total = TO\_NUMBER(NULL)

WHERE order\_id = 2455;

**Answer: A**

**Question: 6**

Which three statements indicate the end of a transaction? (Choose three.)

A. after a COMMIT is issued

B. after a ROLLBACK is issued

C. after a SAVEPOINT is issued

D. after a SELECT statement is issued

E. after a CREATE statement is issued

**Answer: A, B, E**

**Question: 7**

View the Exhibit and examine the descriptions of the DEPT and LOCATIONS tables.

You want to update the CITY column of the DEPT table for all the rows with the corresponding value in the CITY column of the LOCATIONS table for each department.

Which SQL statement would you execute to accomplish the task?

A. UPDATE dept d

SET city = ANY (SELECT city

FROM locations l); B. UPDATE dept d

SET city = (SELECT city

FROM locations l)

WHERE d.location\_id = l.location\_id; C. UPDATE dept d

SET city = (SELECT city

FROM locations l

WHERE d.location\_id = l.location\_id); D. UPDATE dept d

SET city = ALL (SELECT city

FROM locations l

WHERE d.location\_id = l.location\_id);

**Answer: C**

**Question: 8**

Evaluate the following DELETE statement: DELETE FROM orders;

There are no other uncommitted transactions on the ORDERS table. Which statement is true about the DELETE statement?

A. It removes all the rows in the table and allows ROLLBACK.

B. It would not remove the rows if the table has a primary key.

C. It removes all the rows as well as the structure of the table.

D. It removes all the rows in the table and does not allow ROLLBACK.

**Answer: A**

**Question: 9**

View the Exhibit and examine the structure of ORDERS and ORDER\_ITEMS tables.

ORDER\_ID is the primary key in the ORDERS table.

It is also the foreign key in the ORDER\_ITEMS table wherein it is created with the ON DELETE CASCADE option.

Which DELETE statement would execute successfully?

A. DELETE order\_id

FROM orders

WHERE order\_total < 1000;

B. DELETE orders

WHERE order\_total < 1000; C. DELETE

FROM orders

WHERE (SELECT order\_id

FROM order\_items);

D. DELETE orders o, order\_items i

WHERE o.order\_id = i.order\_id;

**Answer: B**

**Question: 10**

View the Exhibit and examine the structure of EMPLOYEES and JOB\_HISTORY tables.

The EMPLOYEES table maintains the most recent information regarding salary, department, and job for all the employees. The JOB\_HISTORY table maintains the record for all the job changes for the employees. You want to delete all the records from the JOB\_HISTORY table that are repeated in the EMPLOYEES table.

Which two SQL statements can you execute to accomplish the task? (Choose two.)

A. DELETE

FROM job\_history j

WHERE employee\_id =

(SELECT employee\_id

FROM employees e

WHERE j.employee\_id = e.employee\_id) AND job\_id = (SELECT job\_id

FROM employees e

WHERE j.job\_id = e.job\_id);

B. DELETE

FROM job\_history j

WHERE (employee\_id, job\_id) = ALL

(SELECT employee\_id, job\_

FROM employees e

WHERE j.employee\_id = e.employee\_id and j.job\_id = e.job\_id )

C. DELETE

FROM job\_history j

WHERE employee\_id =

(SELECT employee\_id

FROM employees e

WHERE j.employee\_id = e.employee\_id and j.job\_id = e.job\_id )

D. DELETE

FROM job\_history j

WHERE (employee\_id, job\_id) =

(SELECT employee\_id, job\_id

FROM employees e

WHERE j.employee\_id = e.employee\_id and j.job\_id = e.job\_id )

**Answer: C, D**

**Question: 11**

View the Exhibit and examine the structure of ORDERS and CUSTOMERS tables.

Evaluate the following UPDATE statement: UPDATE

(SELECT order\_date, order\_total, customer\_id

FROM orders)

SET order\_date = '22-mar-2007' WHERE customer\_id =

(SELECT customer\_id

FROM customers

WHERE cust\_last\_name = 'Roberts' AND

credit\_limit = 600);

Which statement is true regarding the execution of the above UPDATE statement?

A. It would not execute because two tables cannot be used in a single UPDATE statement.

B. It would execute and restrict modifications to only the columns specified in the SELECT statement.

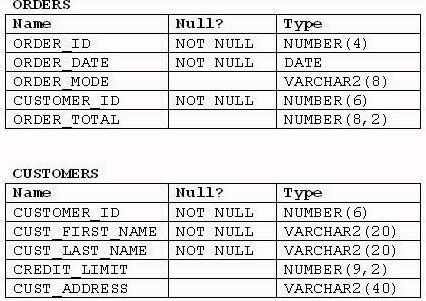
C. It would not execute because a subquery cannot be used in the WHERE clause of an UPDATE statement.

D. It would not execute because the SELECT statement cannot be used in place of the table name.

**Answer: B**

**Question: 12**

View the Exhibit and examine the structure of ORDERS and CUSTOMERS tables.



Which INSERT statement should be used to add a row into the ORDERS table for the customer whose CUST\_LAST\_NAME is Roberts and CREDIT\_LIMIT is 600?

A. INSERT INTO orders

VALUES (1,'10-mar-2007', 'direct',

(SELECT customer\_id

FROM customers

WHERE cust\_last\_name='Roberts' AND

credit\_limit=600), 1000);

B. INSERT INTO orders (order\_id,order\_date,order\_mode,

(SELECT customer\_id

FROM customers

WHERE cust\_last\_name='Roberts' AND

credit\_limit=600),order\_total)

VALUES(1,'10-mar-2007', 'direct', &&customer\_id, 1000); C. INSERT INTO orders (order\_id,order\_date,order\_mode,

(SELECT customer\_id

FROM customers

WHERE cust\_last\_name='Roberts' AND

credit\_limit=600),order\_total)

VALUES(1,'10-mar-2007', 'direct', &customer\_id, 1000);

D. INSERT INTO(SELECT o.order\_id, o.order\_date,o.order\_mode,c.customer\_id, o.order\_total

FROM orders o, customers c

WHERE o.customer\_id = c.customer\_id

AND c.cust\_last\_name='Roberts' ANDc.credit\_limit=600 ) VALUES (1,'10-mar-2007', 'direct',(SELECT customer\_id FROM customers

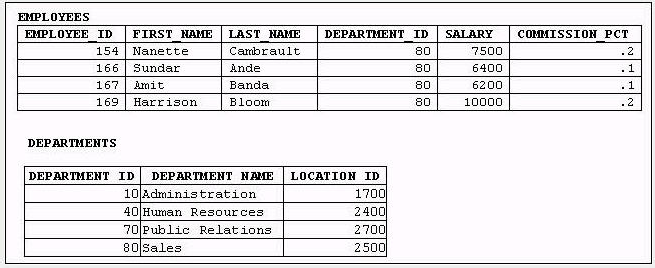
WHERE cust\_last\_name='Roberts' AND

credit\_limit=600), 1000);

**Answer: A**

**Question: 13**

View the Exhibit and examine the data in EMPLOYEES and DEPARTMENTS tables.



In the EMPLOYEES table EMPLOYEE\_ID is the PRIMARY KEY and DEPARTMENT\_ID is the FOREIGN KEY. In the DEPARTMENTS table DEPARTMENT\_ID is the PRIMARY KEY. Evaluate the following UPDATE statement:

UPDATE employees a

SET department\_id =

(SELECT department\_id

FROM departments

WHERE location\_id = '2100'),

(salary, commission\_pct) =

(SELECT 1.1\*AVG(salary), 1.5\*AVG(commission\_pct) FROM employees b

WHERE a.department\_id = b.department\_id) WHERE first\_name||' '||last\_name = 'Amit Banda'; What would be the outcome of the above statement?

A. It would execute successfully and update the relevant data.

B. It would not execute successfully because there is no LOCATION\_ID 2100 in the

DEPARTMENTS table.

C. It would not execute successfully because the condition specified with the concatenation operator is not valid.

D. It would not execute successfully because multiple columns

(SALARY,COMMISSION\_PCT)cannot be used in an UPDATE statement.

**Answer: A**

**Question: 14**

You executed the following SQL statements in the given order: CREATE TABLE orders

(order\_id NUMBER(3) PRIMARY KEY, order\_date DATE,

customer\_id number(3));

INSERT INTO orders VALUES (100,'10-mar-2007',222); ALTER TABLE orders MODIFY order\_date NOT NULL; UPDATE orders SET customer\_id=333;

DELETE FROM order;

The DELETE statement results in the following error: ERROR at line 1:

ORA-00942: table or view does not exist

What would be the outcome?

A. All the statements before the DELETE statement would be rolled back.

B. All the statements before the DELETE statement would be implicitly committed within the session.

C. All the statements up to the ALTER TABLE statement would be committed and the outcome of

UPDATE statement would be rolled back.

D. All the statements up to the ALTER TABLE statement would be committed and the outcome of the UPDATE statement is retained uncommitted within the session.

**Answer: D**

**Question: 15**

View the Exhibit and examine the structure of ORDER\_ITEMS and ORDERS tables.

You need to remove from the ORDER\_ITEMS table those rows that have an order status of 0 or

1 in the ORDERS table.

Which DELETE statements are valid? (Choose all that apply.)

A. DELETE

FROM order\_items

WHERE order\_id IN (SELECT order\_id

FROM orders

WHERE order\_status in (0,1));

B. DELETE \*

FROM order\_items

WHERE order\_id IN (SELECT order\_id

FROM orders

WHERE order\_status IN (0,1));

C. DELETE FROM order\_items i

WHERE order\_id = (SELECT order\_id FROM orders o

WHERE i.order\_id = o.order\_id AND

order\_status IN (0,1));

D. DELETE

FROM (SELECT \* FROM order\_items i,orders o

WHERE i.order\_id = o.order\_id AND order\_status IN (0,1));

**Answer: A, C, D**