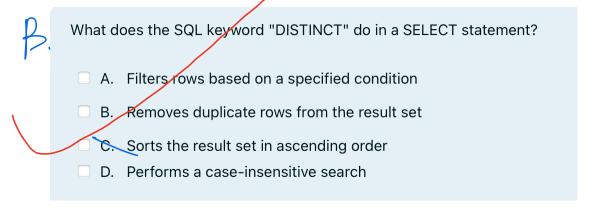
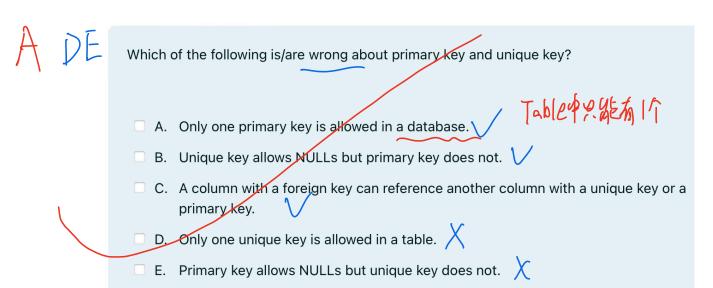
SQL quiz





Given the relation below:

staff

name (varchar(100))	email (varchar(100))	age (int)
Wesley Huang	w.huang@abc.com	27
Sam Shaw	s.shaw@abc.com	31
Chris Lee	c.lee@def.com	47
Steve Shen	s.shen@def.com	22
Craig Johnson	c.johns@gkd.com	51

After executing "DELETE FROM staff WHERE age > 30 and age < 46;",

the degree of this table becomes and the cardinality becomes

SQL stands for:

- A. Synchronized Query Language
- □ B. Standard Query Language
- C. Sequential Query Language
 - D. Structured Query Language

Instead of using NULL, sometimes special values are used to represent missing information. For example, 0 is used when the age of someone is unknown. Which of the following statement(s) is/are correct about these special values?

| a. Special values can replace NULL in all situations.

| b. One advantage of using special values over NULL is that they can indicate different types of missing information.

| c. Special values need to be taken care of whenever WHERE clauses are involved.

| d. Special values have increase the complexity of update operations because they can be updated accidentally

| e. Special values reduces the complexity of delete operations because less

conditions need to be considered.

Given two tables x and y:

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^	
а	b
4	6
3	4
9	9
8	1
2	12

(4,6)	(2,4)	8

(2,12) ×

	у	
	а	b
3	6	6
	4	7
	6	8
	2	4
	8	11

The result of query "SELECT x.b + y.a FROM x, y WHERE x.a = y.a + 2;" contains rows The maximum value is and the minimum value is

What is the PRIMARY purpose of Entity-Relationship (ER) modeling in database design?

- lacksquare A. To define the data types for columns in database tables igsep
- □ B. To optimize SQL queries for database performance
- ☐ C. To visualize and define the structure of a database
- D. To create user interfaces for database applications

Given two tables x and y:

X

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а	b
1	10
2	11
3	12
4	13
5	14

у	
а	b
3	1
4	1
5	2
6	5
7	3

The result of query "SELECT * FROM x WHERE EXISTS (SELECT * FROM y WHERE b = x.a);" contains rows. The sum of column 'a' of the query result is



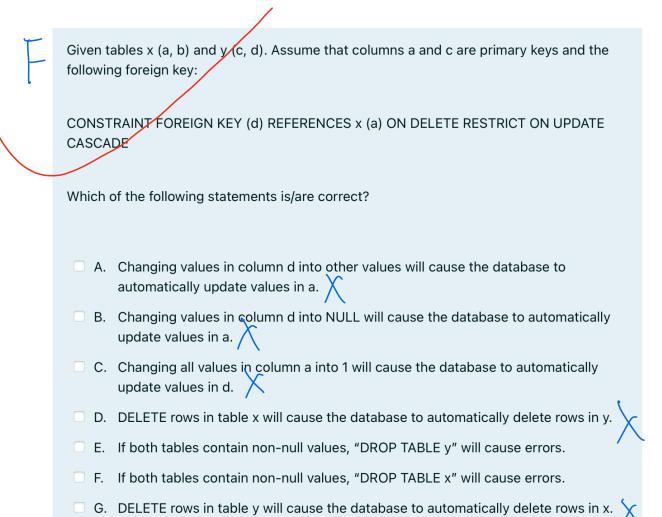
You are querying a database and want to find all records where a certain column is not NULL. Which SQL clause should you use?



☐ B. WHERE column = NULL



□ D. WHERE column <> NULL 不是一个值是一个状态,不能运算符化较



staff

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MUI	abc.com	L V

After executing all of the following instructions in exactly the same order:

INSERT INTO staff VALUES (NULL, 'x@abc.com', 28);

ALTER TABLE staff ADD COLUMN type VARCHAR(10);

UPDATE staff SET type = 'employee' WHERE age < age + 1;

UPDATE staff SET type = 'manager' WHERE name NOT LIKE '%g%';

There will be manager(s) and employee(s). The whole table will have tuples in total.

If the query

SELECT * FROM staff

WHERE name NOT IN (

SELECT name FROM staff WHERE email LIKE '%@def.com'

);

is executed on the final table, the query results contain employee(s) and manager(s) in total.

Varcharlo

e

m

m

m

c



Which of the following questions are correct about normalisation?

- A. Both transitive dependency and partial dependency must involve primary key columns
- B. An 1NF table without partial dependencies may also be in 3NF
- C. A table in 2NF is also in 3NF if no transitive dependencies are found
 - D. A table in 1NF is also in 3NF if it does not have no transitive dependencies

ACE

Given a table Given a table T (a, b, c, d, e, f, g) with (a, b, c) being the primary key and the following additional functional dependencies:

$$g - > c$$

After normalizing this table to 3NF, which of the following tables are NOT in the final result?

- 🗆 A. Table (d, e) with primary key (d) 🗡
- B. Table (b, c, e, f) with primary key (b, c)
- C. Table (a, b, g) with primary key (g) X
- □ D. Table (a, b, c, g) with primary key (a, b, c) \
- ☐ E. Table (c, g) with primary key (g)

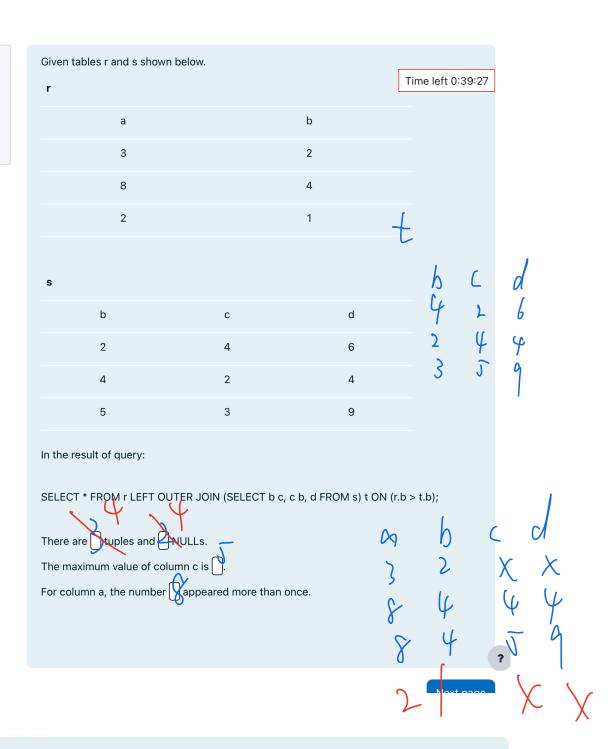
(a,h,(,g)

ch, c, e, f)

c e , d

Question 1 Not yet answered Marked out of 8.00 Frag

question



Which SQL JOIN type returns all rows from both tables, filling in NULL values for non-matching rows?



B. RIGHT OUTER JOIN

C. INNER JOIN

D. LEFT OUTER JOIN