Results

Seif Kungulio — 1st Attempt

100%

25
Out of 25 points

10:16
Time for this attempt

1 attempt left

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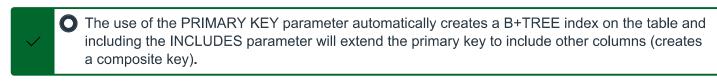## ⌄ Attempt History

Your Answers:

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1   2.5 / 2.5 points

Which statement holds true about PostgreSQL and the PRIMARY KEY parameter?

✓ ⦿ The use of the PRIMARY KEY parameter automatically creates a B+TREE index on the table and including the INCLUDES parameter will extend the primary key to include other columns (creates a composite key).

◯ Multiple primary keys can be identified in a single table.

◯ The PRIMARY KEY parameter and UNIQUE and NOT NULL parameters must be used separately.

Feedback

Based on your answer

That is correct. In PostgreSQL, establishing a PRIMARY KEY will automatically create a B+TREE index to the column and will extend the dependency on any columns used in an INCLUDES parameter. This is the

same as using a composite key in other databases.

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2   2.5 / 2.5 points

Which one of the following keywords are executed first in the following query:

SELECT id, lastname, firstname, position

FROM employee

WHERE lastname = 'Rogers';

ORDER BY firstname, position;

○ WHERE

○ SELECT

✓ ● FROM

○ ORDER
     BY

Feedback

Based on your answer

That is correct. The WHERE keyword is executed first to identify the totality of the data to be queried. The JOIN keyword is also the first queried keyword when used.

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3   2.5 / 2.5 points

A B+TREE index is essentially a decision tree that finds the path of least resistance to the rows of data queried by using the index value of the key in a node to get to the data written on disk.

✓ ● True

○ False

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4   2.5 / 2.5 points

Which of the following SQL statements will accurately remove rows from the employee table where the employee salary is less than 100 dollars?

○ ALTER TABLE employee

DELETE temp_hire

WHERE salary <= 100;

○ SELECT *

FROM employee

DELETE column salary

WHERE salary < 100;

○ DROP TABLE employee

WHERE salary < 100;

◉ DELETE FROM employee

WHERE salary < 100; ✓

Feedback

Based on your answer
That is correct. To properly delete rows from a table, the DELETE FROM clause is required.

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5   2.5 / 2.5 points

Setting table columns to only accept certain data types of varying lengths is an example of what type of SQL data quality policy?
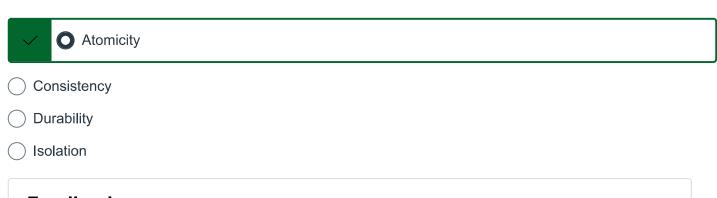
○ Transaction
Policy

○ Record
Lock

✓ ◉ Constraint

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6   2.5 / 2.5 points

When ordering a mountain bike 150-hour fork servicing kit, o-rings, seals, and oil are all required. Each of these items are maintained separately as line items. When a customer attempts to order a 150-hour service kit and the o-rings are not available, the order will not go through. Which principle does this represent in a relational database?

✓   ⦿ Atomicity

◯ Consistency

◯ Durability

◯ Isolation

Feedback

Based on your answer

Correct. Atomicity relates to the requirement that all three elements of the transaction must be completed or satisfied for the transaction to commit to the database. In this case, the transaction is not successful as the business rule dictates that all three components must be used together.

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7   2.5 / 2.5 points

What is the requirement for a primary key in a table?

◯ The key must explain the variability in the table data

◯ The key must also be in other tables

✓   ⦿ The key must be unique to the data in the table

◯ The key must be easily distinguishable to the programmer

Feedback

Based on your answer

That is correct. A primary key must be unique to the data in the table. The key must be unique to each row in the table.

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8   2.5 / 2.5 points

A set of karaoke books list every song. One book lists the songs by author and the other book lists the songs by song. What relational database principle does this represent?

◯ A relationship

✓ ◉ An index

◯ A table

◯ A schema

Feedback

Based on your answer

That is correct. Distinguishing the songs by artist and song is a method of indexing for easier searching and retrieval. Allowing the singer to choose the easiest method of finding their desired song indexes the results of their search.

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9   2.5 / 2.5 points

In a relational database, data is stored in tuples. What element of the relational database is represented by the record's tuple?

◯ Tables

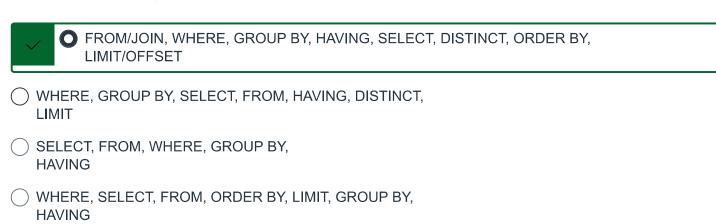◯ Views

◯ Columns

✓ ◉ Rows

Feedback

Based on your answer

That is correct. The tuple is the entirety of a record represented by the row of data in the relational database. Each tuple or row has a shared set of attributes represented by the columns of data in the table.

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10 2.5 / 2.5 points

What is the correct sequence of SQL execution?

- ✓ ⬤ FROM/JOIN, WHERE, GROUP BY, HAVING, SELECT, DISTINCT, ORDER BY, LIMIT/OFFSET

- ○ WHERE, GROUP BY, SELECT, FROM, HAVING, DISTINCT, LIMIT

- ○ SELECT, FROM, WHERE, GROUP BY, HAVING

- ○ WHERE, SELECT, FROM, ORDER BY, LIMIT, GROUP BY, HAVING

Feedback

Based on your answer

That is correct. The FROM/JOIN clauses are executed first to identify necessary table data for the query, then the WHERE clause filters the data, then calculations are done on GROUP BY and filtered on HAVING. The columns are then selected and constraints executed.