How do you best describe the Select operation in relation algebra? The output is a separate relation that

Select one:

a. Allows us to select subset of columns based on certain constraints

b. Allows to combine the two different relations

c. Deletes the unwanted rows from a relation

d. Deletes the unwanted columns from a relation

==

How do you best describe the Project operation in relation algebra? The output is a separate relation that

Select one:

a. Allows us to select subset of columns and subset of rows based on certain constraints

b. Deletes the unwanted rows from a relation

c. Allows to combine the two different relations

d. Deletes the unwanted columns from a relation

==

Which of the following is NOT an example of constraint in SQL

Select one:

a. Foreign key

b. Primary key

c. delete

d. Not Null

==

How do you best describe the set difference operation in relation algebra

Select one:

a. It takes the tuples from both the relations at the same time removing the duplicates

b. Uses the mathematical difference between individual absolute values of each tuple in two relations

c. It takes the attributes that are in first relation but not in the second relation

d. It takes tuples in first relation but not in second relation

==

What is the result of applying division operator between relation 1 and relation 2 in relation algebra?

Select one:

a. A relation with attributes common between relation 1 and relation 2

b. A relation with attributes in relation 1 without the attributes common between relation 1 and relation 2

c. A relation with only attributes of relation 1

d. A relation with attributes in relation 1 and the attributes in relation 2

==

drop table student; This SQL statement will

Select one:

a. drop all the constraints associated with the table

b. delete all the tuples of the table while keeping the table

c. delete all the tuples along with the constraints in the table

d. delete the table student along with all the tuples

==

What is "on delete cascade" in SQL?

Select one:

a. its a foreign key constraint that restricts the entity to be deleted

b. it is a delete constraint that restricts the table to be deleted

c. its a delete constraint on primary key

d. it is a foreign key constraint that deletes entity in the foreign key if the coorresponding entity is deleted

===

**SELECT ename FROM emp WHERE comm IS NULL and job ='CLERK ' or job = 'SALESMAN';
What is the output of this SQL Query?**

Select one:

a. it prints the ename from emp table when job is clerk or slaesman and comm is null

b. it prints the ename from emp table when job is clerk and slaesman and comm is null

c. it prints the ename from emp table when comm is null and job is clerk. It also prints the ename whose job is salesman

d. it prints the ename from emp table when job is clerk or slaesman or comm is null

===

What is the result of natural join operation if we don't have any attribute common

Select one:

a. The result is as good as full outer join

b. The result will not have any tuples

c. The result is as good as a Cartesian product

d. The result is as good as theta join

===

Second normal form is most closely associated with

Select one:

a. full functional dependency

b. trivial functional dependency

c. multivalued functional dependency

d. transitive functional dependency

==

What is a trivial functional dependency?

Select one:

a. A functional dependency where the RHS is subset of LHS

b. A functional dependency that can be inferred from the relation

c. A functional dependency where part of functional dependency is given and part can be inferred

d. A functional dependency in which LHS is subsed of RHS

==

What is "on delete restrict" in SQL?

Select one:

a. it is a delete constraint that restricts the table to be deleted

b. it is a foreign key constraint that deletes entity in the foreign key if the coorresponding entity is deleted

c. its a foreign key constraint that restricts the entity to be deleted

d. its a delete constraint on primary key
==

SELECT ename FROM emp WHERE ename like 'J%'; this query

Select one:

a. List the employee names whose names start with J and ends with J

b. List the employee names whose names have J in their name

c. List the employee names whose names start with J and are two letters only

d. List the employee names whose names start with J

==

Which of the following is NOT a relation algebra operation

Select one:

a. Project

b. Division

c. Select

d. Where

===

$\pi_{customer\_name}$ (depositor) ∪ $\pi_{customer\_name}$ (borrower).

Select one:

a. The set difference operation will result in faster output than the above query.

b. The relation will output another relation having only customer_name attribute and there may be some duplicates

c. The output of the relation algebra query will be the same when we do the union of depositor and borrower and then apply projection operation. Schemas for depositor and borrower are: depositor (customer_name, account_number); borrower (customer_name, loan_number). account_number and loan_number have different domains.

d. The relation will output another relation having only customer_name attribute and there will not be any duplicates

===

What is true with respect to data definition language in SQL

Select one:

a. It is used to query the table

b. It is used to enhance security of the database

c. It is used to create a table

d. It is used to insert tuples in the table

==

$\pi_{loan\_number} (\sigma_{amount > 1200} (loan))$

Select one:

a. Both select and project operation are mutually exclusive, hence apart from efficiency there is no effect on the answer

b. If the select and project operations are applied on a relation, it is same as union and intersection operation

c. If we do project first in the inner parenthesis and select later on, the answer is going to change

d. If we do project first in the inner parenthesis and select later on, the answer is NOT going to change

==

What is true with respect to aggregate functions in relation algebra

Select one:

a. They take a group of relations and return a single relation as a result

b. They take a collection of values and return a single value as a result.

c. They take a group of relations and return a group of relations as a result

d. The aggregation operations have the capability to replace the select operation

==

What is true with respect to data manipulation language in SQL

Select one:

a. It is used to alter table in the database

b. It is used to enhance security of the database

c. It is used to create a table

d. It is used to retrieve data from the existing table

==

What is true with respect to the constraints in SQL

Select one:

a. We can specify constraints applicable to entire table using DML

b. We can specify constraints applicable to the individual tuple using DDL

c. We can specify constraints applicable to individual columns using DDL

d. We can specify constraints applicable to individual coluumns using DML

==

How do you best describe the union operation in relation algebra

Select one:

a. It takes the tuples from both the relations at the same time removing the duplicates

b. It takes the attributes of both the relations and removing the duplicates

c. Uses the mathematical addition of individual absolute values of each tuples in two relations

d. It takes tuples in first relation but not in second relation

==

What is true with respect to data control language in SQL

Select one:

a. It is used to query the table

b. It is used to enhance security of the database

c. It is used to create a table

d. It is used to insert tuples in the table

==

Third normal form is most closely associated with

Select one:

a. full functional dependency

b. transitive functional dependency

c. trivial functional dependency

d. multivalued functional dependency

===

In order to find the maximum value of an attribute in a relation without using the aggregate function

Select one:

a. We need to use the rename operation

b. We need to use the left outer join operation

c. we need to use the set difference operation

d. we need to use the union operation

===

if the relation1 has 4 attributes and 6 tuples, relation2 has 2 attributes and 3 tuples. What is the output of Cartesian product of relation 1 with relation 2

Select one:

a. There will be total of 6 attributes and 9 tuples in final relation.

b. There will be total of 6 attributes and 18 tuples in final relation.

c. There will be total of 8 attributes and 18 tuples in final relation.

d. There will be total of 8 attributes and 9 tuples in final relation.