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CSCI 391

Homework 4

1. What will happen if a unique index is created on a non-unique field?

The unique index will not be created and you will get an error.

2. Are the following statements true/false?

- Both views and indexes take up space in the database and therefore must be factored in the planning of the database size. **FALSE**

- If someone updates a table on which a view has been created the view must have an identical update performed on it to see the same data. **FALSE**

- If you have the disk space and you really want to get your queries smoking, the more indexes the better. **FALSE**

3. Is the following create statement correct?

It is not correct because since you are selecting all you don’t use the word all instead you use the “\*”. Also the parentheses is not needed when using the create statement.

1. Is the following create statement correct?

Unique view isn’t part of the SQL language so the statement isn’t correct.

1. Is the following create statement correct?

No the correct syntax should be “drop view debts;”

1. Is the following create statement correct?

Yes.

1. When nesting transactions, does issuing a rollback transaction command cancel the current transaction and roll back the batch of statements into the upper-level transaction? Why or why not?

No, when you use a rollback it cancels every transaction that is running and it all will not be saved until the outer transaction is committed.

1. Can savepoints be used to “save off” portions of a transaction? Why or why not?

Yes, because savepoints can be rolled backed to a specific save point of the transaction.

1. Can a commit command be used by itself or must it be embedded?

Yes, a commit command can be used by itself.

1. If you issue the commit command and then discover a mistake, can you still use the rollback command?

No, if you issue the commit command and discover a mistake you cannot make changes when you roll back.

1. Will using a savepoint in the middle of a transaction save all that happened before it automatically?

No it will not.

1. What is wrong with the following statement?

Connection should be changed to “connect”.

1. True/false: dropping a user will cause all objects owned by that user to be dropped as well.

It is true but you must use the cascade statement.

1. What would happen is you created a table and granted select privileges on the table to public?

If you do anyone can have access and select your table.

1. Is the following SQL statement correct?

Yes everything is correct.

1. Is the following SQL statement correct?

No, it is not correct. There should be the word “user” in between Alter and Ron.

1. If you own a table, who can select from that table?

You set the specific users that can access your table with the select privilege option.

1. What does streamline an SQL statement mean?

When you use streamline you are essentially taking the fastest path with careful planning of SQL statements.

1. Should tables and their corresponding indexes reside on the same disk?

No, you should always store them in separate disks.

1. Why is the arrangement of conditions in an SQL statement important?

If you do the correct arrangements you can have a more efficient data access.

1. What happens during a full-table scan?

It will essentially scan (row by row) instead of using indexes that points to a specific row.

1. How can you avoid a full-table scan?

It can be avoided if you create an index.

1. What are some common hindrances of general performance?

You can be running a large load that are not scheduled also improper usage of disks available can cause performance issues.

1. Make the following SQL statement more readable.

Select emp.l\_m, emp.f\_n, emp.m\_n, emp.add, emp.ph\_num, payroll.sal, payroll.pos, emp.ssn, payroll.s\_date

From employee emp, payroll payroll

Where emp.ssn, = payroll.ssn and emp.l\_n like ‘s%’ and payroll.sal > 20000;

1. Rearrange the conditions in the following query to optimize data retrieval time. Use the following statistics to determine the order of the conditions.

Select m.individual\_name, m.address, m.city, m.state, m.zip\_code, s.sex, s.martial\_status, s.salary

From mailing\_tbl m, individual\_stat\_tbl s

Where m.individual\_id = s.individual\_id and s.martial\_status = ‘s’ and s.sex = ‘male’ and s.salary >= 30000 and m.city = ‘indianapolis’ and m.name like ‘smith%’;

1. What types of information are stored in the data dictionary?

The types of information that are stored in a data dictionary include: growth of objects, performance/user statistic, the SQL codes, database security/design.

1. How can you use performance statistics?

You can use performance statistics by modifying the database parameters along with streamlining SQL.

1. What are some database objects?

Some database objects include: views, tables and indexes.