



You completed this test on *04/18/2023, 02:43 AM*
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CORRECT

What is View? What are the benefits of using views?

A virtual table, which contents are defined by query. It acts as a filter and give flexible permission.

Benifits:

Simplify data manipulation

Allows backward compatible interface

Customize data: can use views to give relevant information with customization to the code based on login ID of user.

In SQL, a view is a virtual table based on the result-set of an SQL statement. Complex and reusable queries can be simply retrived using view.

CORRECT

Can data be modified through views?

Yes. Views are updatable which also changes the table they are derived from.

Yes data can be modified using views but it is not recommended when view using more than one base table.

CORRECT

What is stored procedure and what are the benefits of using it?

Groups one/more transaction SQL statements into a logic units, stored as an object in SSDB.

Benifits:

easily modified with the ALTER PROCEDURE statement.

Reusable and dynamic.

Secure: Stored procedures reduce the threat by eliminating direct access to the tables. The code for SPs can also be encrypted.

Reduced network traffic: When using stored procedures at the application level, only the procedure name and parameters are passed over the network instead of the whole T-SQL code.

Performance: The SQL Server stored procedure when executed for the first time creates a plan and stores it in the buffer pool so that the plan can be reused when it executes next time.(might be a bad thing if input is very different from the input used to generate the plan)

Store procedure is a collection of DML,DDL statements that can be executed together. Store procedures are helpful in maintaining clean scripts and easy testable and isolates business rules etc.

CORRECT

What is the difference between view and stored procedure?

View has just select statements but storeprocedure has collection of DML and DDL statements.

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CORRECT

What is the difference between stored procedure and functions?

Stored Procedure (SP) and Function (UDF - User Defined) have differences below:

SP can return zero, single or multiple values. Function must return a single value (which may be a scalar or a table).

We can use transaction in SP. We can't use transaction in UDF.

SP can have input/output parameter. Only input parameter.

We can call function from SP. We can't call SP from function.

We can't use SP in SELECT/ WHERE/ HAVING statement. We can use UDF in SELECT/ WHERE/ HAVING statement.

We can use exception handling using Try-Catch block in SP. We can't use Try-Catch block in UDF.

Can't be used with APPLY. Can be called in APPLY.

DML is fine and common. Can't use DML. Only DQL.

Can use temp tables. Can only use table variables.

Procedure can use when we want instead is to group a possibly- complex set of SQL statements. Function can use when we want to compute and return a value for use in other SQL statements.

Store procedure can return any number of values or may not return any value but function must return a value. We can use transaction in SP but it is not possible in functions. We can have both input and output parameters in sp but we can have only input parameters in function.

CORRECT

Can stored procedure return multiple result sets?

Yes. by using @xxx OUT/OUTPUT.

Yes

CORRECT

Can stored procedure be executed as part of SELECT Statement? Why?

No. Because store proc may not return a value. Using select must need values.

No. Because store proc may or may not return a value.

CORRECT

What is Trigger? What types of Triggers are there?

Triggers define code to be executed automatically when a certain event happens. Triggers takes no parameters.

DDL Trigger: CREATE, ALTER, DROP

DML trigger: INSERT, UPDATE, DELETE

Trigger in sql server is used for business logics to be executed. SQL server has after trigger and instead of trigger for insert, update and delete statements

CORRECT

What is the difference between Trigger and Stored Procedure?

A trigger is an automatic action that occurs in response to specific events (like insert, update, or delete) on a specified table or view.

It helps maintain data integrity and consistency within the database.

It can't be called explicitly by a user or application.

A stored procedure is a precompiled set of SQL statements that can be called by a user or application.

It is used to perform repetitive tasks, encapsulate complex logic, and improve performance by reducing network traffic.

It can be called explicitly by a user or application using a specific command.

In summary, a trigger is an automatic response to specific events, while a stored procedure is a precompiled set of SQL statements that can be called on demand.

Triggers happen on DML statements occurrence whereas stored procs should be executed manually.

CORRECT

What's the difference between primary key and unique constraints?

primary key vs. unique constraint:

1. unique constraint can accept one and only one null value, but pk cannot accept any null value
2. one table can have multiple unique keys but only one pk
3. pk will sort the data by default, but unique key will not
4. PK will by default create a clustered index, and unique key will create a non-clustered index

INCORRECT

What is Check constraint?

It is a constraint that is set when table is created. When we define check in INSERT INTO statement, if user insertion do not satisfy the condition, it will return error.

Passed. Let's continue.

