

Object	Definition	Key Differences
<b>Trigger vs Stored Procedure</b>	A trigger is an automatic response to certain events on a table or view.	<ul style="list-style-type: none"> <li>- <b>Execution:</b> Triggers run automatically upon an event; stored procedures are called explicitly.</li> <li>- <b>Parameters:</b> Triggers cannot take parameters; stored procedures can.</li> </ul>
<b>Stored Procedure vs Functions</b>	A stored procedure is a precompiled collection of SQL statements, while a function returns a value.	<ul style="list-style-type: none"> <li>- <b>Return Type:</b> Functions return a single value or table; stored procedures do not return a value.</li> <li>- <b>Usage:</b> Functions can be used in SELECT statements; stored procedures cannot.</li> </ul>
<b>DROP vs DELETE</b>	DROP removes an object (table, view) from the database; DELETE removes rows from a table.	<ul style="list-style-type: none"> <li>- <b>Impact:</b> DROP removes the entire structure; DELETE can be selective.</li> <li>- <b>Transaction Log:</b> DROP is logged, DELETE logs each row deleted.</li> </ul>
<b>SELECT vs SELECT INTO</b>	SELECT retrieves data from a table; SELECT INTO creates a new table from the result of a query	<ul style="list-style-type: none"> <li>- <b>Target:</b> SELECT outputs data to a result set; SELECT INTO creates a new table.</li> <li>- <b>Performance:</b> SELECT INTO is generally faster for large data sets.</li> </ul>
<b>DDL, DML, DCL, DQL</b>	Data Definition Language (DDL) defines the structure; Data Manipulation Language (DML)	<ul style="list-style-type: none"> <li>- <b>Purpose:</b> DDL modifies the database schema; DML modifies data; DCL</li> </ul>

	manipulates data; Data Control Language (DCL) controls access; Data Query Language (DQL) retrieves data.	manages permissions; DQL fetches data. - <b>Examples:</b> CREATE, INSERT, GRANT, SELECT.
<b>Table-Valued vs Multi-Statement Function</b>	A table-valued function returns a table; a multi-statement function can return a scalar value.	- <b>Return Type:</b> Table-valued functions return tables; multi-statement functions return a single value. - <b>Usage:</b> Table-valued functions can be used in joins; multi-statement cannot.
<b>VARCHAR(50) vs VARCHAR(MAX)</b>	VARCHAR(50) limits character storage to 50; VARCHAR(MAX) can store up to 2GB of data.	- <b>Size:</b> VARCHAR(50) is a fixed limit; VARCHAR(MAX) is flexible. - <b>Performance:</b> VARCHAR(MAX) may incur performance overhead when handling large data.
<b>SQL vs Windows Authentication</b>	SQL authentication requires a username/password; Windows authentication uses Windows credentials.	- <b>Security:</b> SQL authentication is database-specific; Windows authentication uses existing Windows user rights. - <b>Management:</b> SQL accounts need to be managed separately
<b>Inline Function vs View</b>	An inline function is a function that returns a table; a view is a virtual table based on a query.	- <b>Execution:</b> Inline functions can accept parameters; views cannot. - <b>Usage:</b> Inline functions can be used in queries like a

		table; views cannot directly return values.
<b>Identity vs Unique Constraint</b>	An identity constraint auto-increments a numeric value; a unique constraint ensures all values in a column are unique.	<ul style="list-style-type: none"> <li>- <b>Functionality:</b> Identity creates a unique identifier; unique constraint enforces uniqueness on existing data.</li> <li>- <b>Modification:</b> Identity cannot be modified; unique constraints can.</li> </ul>

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