1. Stored procedure VS Trigger

|  |  |  |
| --- | --- | --- |
|  | Stored procedure | Trigger |
| execution | Must be called in the code | Can’t be called in the code,  But executed automatically when condition apply |
| Parameters | Accept parameters | Don’t accept parameters |
| Return | Can return value | Don’t return value |

1. Stored Procedure vs. Function

|  |  |  |
| --- | --- | --- |
|  | Stored procedure | Function |
| parameters | Input/output | Only input parameters |
| Modify data | Allowed | Restricted |
| Return | May return value | Must return a value |
|  | | |

1. Drop Vs Delete

|  |  |  |
| --- | --- | --- |
|  | Drop | delete |
|  | DDL Query | DML Query |
|  | Can’t be found in log files | Can be found in log files |
|  | Can’t be rolled back | Can be rolled back |
|  | Can’t use where statement in it | Can use where statement in it |
|  | Fast | Slow |
|  | Works with child tables only | Works with any type of tables whether it’s parent or child table |
|  | Remove the whole table with its structure | Deletes row from table but keeps its structure |

1. Select VS Select into

|  |  |  |
| --- | --- | --- |
|  | Select | Select into |
| Usage | Retrieve data | Create table & insert data |
| Result | Set of retrieved data | Physical table |

1. DDL,DML,DCL and DQL

|  |  |  |  |
| --- | --- | --- | --- |
| DDL | DML | DCL | DQL |
| Concerns about meta data & structures | Concerns about data | Concerns about security and permissions | Concerns about displaying and retrieving data |
| Create – alter – drop – delete- select into – stored procedure - truncate | Insert – update – delete – merge | Grant – Deny - Revoke | Select |

1. Table valued VS multi statement function

|  |  |  |
| --- | --- | --- |
|  | Table-Valued Function | Multi-Statement Function |
| Performance | Faster | Slower |
| Flexibility | Limited | High |

1. Varchar(50) and varchar(max)

|  |  |
| --- | --- |
| Varchar(50) | Varchar(max) |
| Fixed length | Variable length |
| Max size 50 characters | Max size is up to 2 GB |
| Used for known values | Used for unknown values |
| Faster in backup and restore | Slower in backup and restore |

1. SQL VS windows authentication

|  |  |
| --- | --- |
| SQL auth | Windows Auth |
| User identity confirmed by sql server | User identity is confirmed by Windows |
| Less secure | More secure |
| Must enter credentials to connect | Can connect without credentials |

1. Inline function VS view

|  |  |  |
| --- | --- | --- |
|  | Inline function | view |
| Type | Table valued function | Virtual table |
| Parameters | Yes | No |
| Return | Yes | No |
|  | |

1. Identity VS Unique Constraint

|  |  |  |
| --- | --- | --- |
|  | Identity | Unique Constraint |
| Auto generated | Yes | No |
| Uniqueness | Yes(Implicit) | Yes(Explicit) |