|  |  |  |
| --- | --- | --- |
|  | 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 |
|  |  |  |
|  |  |  |

**2- Drop & 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 |

|  |  |  |  |
| --- | --- | --- | --- |
| 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 |

**5 - DDL,DML,DCL and DQL**

**7- 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 |

**8- SQL and 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 |