

Sql Lab8 part2

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# **1-Difference between stored procedure and triggers: -**

|  |  |
| --- | --- |
| Stored procedure | Triggers |
| Can be invoked explicitly by the user | Run automatically when various event happens |
| Takes input as parameter | Can’t take input as parameter |
| Can use transaction statements like commit/begin transaction and rollback | Can’t use transaction statement |
| Can return value | Can’t return values |

# **2-Difference between Function and procedure: -**

|  |  |
| --- | --- |
| Function | Procedure |
| Function can be called by procedure | Procedure can’t be called by a function |
| DML statements can’t be executed within function | DML can executed in procedure |
| Can be called in query | Can’t be called in query |
| Compile every call | Compile once |
| Return value to use | Return control not a value |
| No try and catch | Can use try and catch |
| Select can have function call | Select can’t have procedure |

# **3-Difference between Drop and Delete: -**

|  |  |
| --- | --- |
| Delete | Drop |
| Remove some or all data/records from table | Remove named object like table or schema or constrains |
| Is DML | DDL |
| Can use Where clause to filter | Can’t use where clause |
| Table memory space is not free after delete | Free the memory space |

# **4-Difference between select and select into: -**

|  |  |
| --- | --- |
| Select into | Select |
| Create a new table and fills it with data computed by a query and data isn’t returned to the user | Return the data to the user in the table with columns have the names and datatype selected in the select statement. |

# **5-Difference between DDL DML DCL DQL: -**

|  |  |  |  |
| --- | --- | --- | --- |
| DDL | DML | DCL | DQL |
| Data definition language | Data manipulation language | Data control language | Data query language |
| Create, Drop, Alter, Rename ..etc. | Update, Delete, Merge ..etc. | Grant, Revoke | Select, join ..etc. |
| Doesn’t use where clause | Have where clause | Grant/Revoke *p1*  On *table1*  To *user;* | SELECT *col1*  FROM *t1*  JOIN *t2* ON …. |
| Used to create attributes, objects, table, constraint, schema ..etc. | Used to retrieve, add, update the rows in the table | Used to control privilege in the database like system and object privilege | Used to get some schema relation based on the query passed to it. |

# **6-Difference between Table valued and multi-statement function: -**

|  |  |
| --- | --- |
| Table valued | Multi-statement |
| Return a data of table type  Can use the table just like we use table | Return multiple statement  To define it we use a table variable as return value  Inside the function can execute one or more queries and insert data into this table |

# **7-Difference between Varchar(n) and Varchar(max): -**

|  |  |
| --- | --- |
| Varchar(n) | Varchar(max) |
| It stores non-Unicode character with n number of bytes and its maximum storage is 8000 bytes | It stores non-Unicode character string data of maximum storage size (2^31)-1 byte |

# **8-Difference between Windows Authentication and SQL Server Authentication: -**

|  |  |
| --- | --- |
| Windows | SQL server |
| Need to mention server name only. It won’t require a username and password.  you have all read/write access. | We have to mention the Server name as well as user name along with the password.  Generally, you have limited access to the databases inside the server. |

# **9-Difference between Scalar/inline function and View: -**

|  |  |  |
| --- | --- | --- |
| Keys | Scalar function | View |
| Accept Parameters | YES | NO |
| Contain multiple statement | NO | NO |
| Have triggers | NO | Yes |
| Expand out by optimizer | Yes | Yes |

# **10-Difference between Identity and unique constraints: -**

|  |  |
| --- | --- |
| Identity/PK | Unique constraints |
| Table only have one identity  Can’t be null  At creating DB create unique Clustered index | Table can have more than one unique constraint  Can be null  At creating DB create automatically a unique non-clustered index |