(T13)討論LocalTempTable和GlobalTempTable  
CourseGUID: e48417fc-9db5-4e99-822c-706c5ccef6cc  
=======================================================================  
(T13)討論LocalTempTable和GlobalTempTable  
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0. In Summary

1. ReCreate Table V.S. Global/Local TempTable

2. Select/Insert Global/Local TempTable

3. Global/Local TempTable with Stored Procedure

4. Clean up  
=======================================================================

0. In Summary

In Summary

1.

Local Temp Table V.S. Global Temp Table

Databases --> System Databases --> tempdb -->

Temporary Tables --> #LocalTempTable/##GlobalTempTable

1.1.

#LocalTempTable

1.1.1.

Prefix with One pound (#) symbol.  E.g. #LocalTempTable

1.1.2.

SQL server appends a long underscore and some random numbers.

E.g.

#Person\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_000000000195

1.1.3.

#LocalTempTable is available for current connection/session/query window/query file.

It is automatically dropped after closing the current connection/session/query window/query file.

1.1.4.

#LocalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

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1.2.

##GlobalTempTable

1.2.1.

Prefix with Double pound (##) symbol.  E.g. ##GlobalTempTable

1.2.2.

SQL server will give a Table Name without appending any random number.

E.g.

dbo.##Person3

1.2.3.

##GlobalTempTable is available for any connection/session/query window/query file.

It is automatically dropped after closing the ALL connection/session/query window/query file.

1.2..4.

##GlobalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

==================================================

更正1:

該範例 spLocalTempTable的內容是建立LocalTempTable #Person4，但在insert的語法是insert到#Person2，所以在查詢#Person4時，才沒有資料

以下為更正後的版本

--T013\_03\_01

--Local TempTable in Stored Procedure

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

                        AND LEFT(ROUTINE\_NAME, 3) NOT IN ( 'sp\_', 'xp\_', 'ms\_' )

                        AND SPECIFIC\_NAME = 'spLocalTempTable' ) )

    BEGIN

        DROP PROCEDURE spLocalTempTable;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spLocalTempTable

AS

    BEGIN

        IF OBJECT\_ID('tempdb..#Person4') IS NOT NULL

            BEGIN

                TRUNCATE TABLE #Person4;

                DROP TABLE #Person4;

            END;

        CREATE TABLE #Person4

        (

          Id INT IDENTITY(1, 1)

                 PRIMARY KEY

                 NOT NULL ,

          Name NVARCHAR(20) NULL

        );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name1' );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name2' );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name3' );

        SELECT  \*

        FROM    #Person4;

    END;

GO -- Run the prvious command and begins new batch

EXECUTE spLocalTempTable;

GO -- Run the prvious command and begins new batch

經過實驗證明，所以結論也改了，請忽略我在影片中的T013\_03\_01的結論。

這邊才是對的。﻿

/\*

1.

#LocalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

2.

--Execute spLocalTempTable

returns something

\*/

----------------------------------------------

補充2:

The important summary:

2.1.

#LocalTempTable is available for current connection/session/query window/query file.

2.2.

##GlobalTempTable is available for any connection/session/query window/query file.

2.3.

#LocalTempTable and ##GlobalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

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2.1.

#LocalTempTable只能用在current connection/session/query window/query file

2.2.

##GlobalTempTable可以用在任一個connection/session/query window/query file.

2.3.

#LocalTempTable 和 ##GlobalTempTable 在 stored procedure execution 結束的時候，都還繼續存活。

==================================================

1. ReCreate Table V.S. Global/Local TempTable

--=============================================================================

--T013\_01\_ReCreate Table V.S. Global/Local TempTable

--=============================================================================

--=============================================================================

--T013\_01\_01

--Create or Recreate table

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.TABLES

              WHERE     TABLE\_NAME = 'Person1' ) )

    BEGIN

        TRUNCATE TABLE Person1;

        DROP TABLE Person1;

    END;

GO -- Run the previous command and begins new batch

CREATE TABLE Person1

(

  Id INT IDENTITY(1, 1)

         PRIMARY KEY

         NOT NULL ,

  Name NVARCHAR(20) NULL

);

Text

Description automatically generated with medium confidence

--=============================================================================

--T013\_01\_02

--Create or Recreate Local TempTable

--From SQL Server 2016 you can just use

DROP TABLE IF EXISTS #Person2

CREATE TABLE #Person2

(

  Id INT IDENTITY(1, 1)

         PRIMARY KEY

         NOT NULL ,

  Name NVARCHAR(20) NULL

);

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..#Person2') IS NOT NULL

    BEGIN

        TRUNCATE TABLE #Person2;

        DROP TABLE #Person2;

    END;

GO -- Run the previous command and begins new batch

CREATE TABLE #Person2

(

  Id INT IDENTITY(1, 1)

         PRIMARY KEY

         NOT NULL ,

  Name NVARCHAR(20) NULL

);

--Check temp table information

SELECT  \*

FROM    tempdb..sysobjects

WHERE   name LIKE '#Person2%';

GO -- Run the previous command and begins new batch



Graphical user interface, text, application

Description automatically generated

--=============================================================================

--T013\_01\_03

--Create or Recreate Global TempTable

--From SQL Server 2016 you can just use

DROP TABLE IF EXISTS ##Person3

CREATE TABLE ##Person3

(

  Id INT IDENTITY(1, 1)

         PRIMARY KEY

         NOT NULL ,

  Name NVARCHAR(20) NULL

);

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..##Person3') IS NOT NULL

    BEGIN

        TRUNCATE TABLE ##Person3;

        DROP TABLE ##Person3;

    END;

GO -- Run the previous command and begins new batch

CREATE TABLE ##Person3

(

  Id INT IDENTITY(1, 1)

         PRIMARY KEY

         NOT NULL ,

  Name NVARCHAR(20) NULL

);

--Check temp table information

SELECT  \*

FROM    tempdb..sysobjects

WHERE   name LIKE '##Person3%';

GO -- Run the previous command and begins new batch



Graphical user interface, text, chat or text message

Description automatically generated

==================================================

2. Select/Insert Global/Local TempTable

--=============================================================================

--T013\_02\_Select/Insert Global/Local TempTable

--=============================================================================

--=============================================================================

--T013\_02\_01

--Local Temp Table

INSERT  INTO #Person2

VALUES  ( 'P2Name1' );

INSERT  INTO #Person2

VALUES  ( 'P2Name2' );

INSERT  INTO #Person2

VALUES  ( 'P2Name3' );

SELECT  \*

FROM    #Person2;

SELECT  name

FROM    tempdb..sysobjects

WHERE   name LIKE '#Person2%';

GO -- Run the previous command and begins new batch

Table

Description automatically generated

--=============================================================================

--T013\_02\_02

--Global Temp Table

INSERT  INTO ##Person3

VALUES  ( 'P3Name1' );

INSERT  INTO ##Person3

VALUES  ( 'P3Name2' );

INSERT  INTO ##Person3

VALUES  ( 'P3Name3' );

SELECT  \*

FROM    ##Person3;

SELECT  name

FROM    tempdb..sysobjects

WHERE   name LIKE '##Person3%';

GO -- Run the previous command and begins new batch

Graphical user interface, application, table, Excel

Description automatically generated

==================================================

3. Global/Local TempTable with Stored Procedure

--=============================================================================

--T013\_03\_Global/Local TempTable with Stored Procedure

--=============================================================================

--=============================================================================

--T013\_03\_01

--Local TempTable in Stored Procedure

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

                        AND LEFT(ROUTINE\_NAME, 3) NOT IN ( 'sp\_', 'xp\_', 'ms\_' )

                        AND SPECIFIC\_NAME = 'spLocalTempTable' ) )

    BEGIN

        DROP PROCEDURE spLocalTempTable;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spLocalTempTable

AS

    BEGIN

        IF OBJECT\_ID('tempdb..#Person4') IS NOT NULL

            BEGIN

                TRUNCATE TABLE #Person4;

                DROP TABLE #Person4;

            END;

        CREATE TABLE #Person4

        (

          Id INT IDENTITY(1, 1)

                 PRIMARY KEY

                 NOT NULL ,

          Name NVARCHAR(20) NULL

        );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name1' );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name2' );

        INSERT  INTO #Person4

        VALUES  ( 'spP4Name3' );

        SELECT  \*

        FROM    #Person4;

    END;

GO -- Run the prvious command and begins new batch

EXECUTE spLocalTempTable;

GO -- Run the prvious command and begins new batch

/\*

1.

#LocalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

2.

--Execute spLocalTempTable

returns something

\*/

--=============================================================================

--T013\_03\_02

--Global TempTable in Stored Procedure

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

                        AND LEFT(ROUTINE\_NAME, 3) NOT IN ( 'sp\_', 'xp\_', 'ms\_' )

                        AND SPECIFIC\_NAME = 'spGlobalTempTable' ) )

    BEGIN

        DROP PROCEDURE spGlobalTempTable;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spGlobalTempTable

AS

    BEGIN

        IF OBJECT\_ID('tempdb..##Person5') IS NOT NULL

            BEGIN

                TRUNCATE TABLE ##Person5;

                DROP TABLE ##Person5;

            END;

        CREATE TABLE ##Person5

        (

          Id INT IDENTITY(1, 1)

                 PRIMARY KEY

                 NOT NULL ,

          Name NVARCHAR(20) NULL

        );

        INSERT  INTO ##Person5

        VALUES  ( 'spP3Name1' );

        INSERT  INTO ##Person5

        VALUES  ( 'spP3Name2' );

        INSERT  INTO ##Person5

        VALUES  ( 'spP3Name3' );

        SELECT  \*

        FROM    ##Person5;

    END;

GO -- Run the prvious command and begins new batch

EXECUTE spGlobalTempTable;

GO -- Run the prvious command and begins new batch

/\*

1.

##GlobalTempTable will NOT be automatically dropped

on the completion of stored procedure execution.

2.

--Execute spGlobalTempTable

returns something.

\*/

Table

Description automatically generated

==================================================

4. Clean up

--=============================================================================

--T013\_04\_Clean up

--=============================================================================

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.TABLES

              WHERE     TABLE\_NAME = 'Person1' ) )

    BEGIN

        TRUNCATE TABLE Person1;

        DROP TABLE Person1;

    END;

GO -- Run the previous command and begins new batch

--------------------------------------------------------------------

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..#Person2') IS NOT NULL

    BEGIN

        TRUNCATE TABLE #Person2;

        DROP TABLE #Person2;

    END;

GO -- Run the previous command and begins new batch

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..##Person3') IS NOT NULL

    BEGIN

        TRUNCATE TABLE ##Person3;

        DROP TABLE ##Person3;

    END;

GO -- Run the previous command and begins new batch

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..#Person4') IS NOT NULL

    BEGIN

        TRUNCATE TABLE #Person4;

        DROP TABLE #Person4;

    END;

GO -- Run the previous command and begins new batch

--From Previous version of SQL server

IF OBJECT\_ID('tempdb..##Person5') IS NOT NULL

    BEGIN

        TRUNCATE TABLE ##Person5;

        DROP TABLE ##Person5;

    END;

GO -- Run the previous command and begins new batch

--------------------------------------------------------------------

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

                        AND LEFT(ROUTINE\_NAME, 3) NOT IN ( 'sp\_', 'xp\_', 'ms\_' )

                        AND SPECIFIC\_NAME = 'spLocalTempTable' ) )

    BEGIN

        DROP PROCEDURE spLocalTempTable;

    END;

GO -- Run the previous command and begins new batch

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

                        AND LEFT(ROUTINE\_NAME, 3) NOT IN ( 'sp\_', 'xp\_', 'ms\_' )

                        AND SPECIFIC\_NAME = 'spGlobalTempTable' ) )

    BEGIN

        DROP PROCEDURE spGlobalTempTable;

    END;

GO -- Run the previous command and begins new batch