(T44)討論DynamicTempTables  
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(T44)討論DynamicTempTables  
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0. Summary

1. Temp Table In Dynamic SQL

2. Life scope of temp Table In Dynamic SQL

3. Life scope of temp Table In Dynamic SQL

4. Clean up  
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0. Summary

1.

--CREATE PROCEDURE spTempTableInDynamicSQL

--AS

--    BEGIN

--        DECLARE @sql NVARCHAR(MAX) = 'Create Table #TempTable(Id INT)

--                           insert into #TempTable values (500)';

--        EXECUTE sp\_executesql @sql;

--        SELECT  \*

--        FROM    #TempTable;

--    END;

--GO -- Run the previous command and begins new batch

--EXECUTE spTempTableInDynamicSQL;

Return Error

Temp tables created by dynamic SQL are dropped

when the dynamic SQL block in the stored procedure completes execution.

Thus, the calling procedure can not access them.

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2.

--CREATE PROCEDURE spTempTableInDynamicSQL

--AS

--    BEGIN

--        CREATE TABLE #TempTable ( Id INT );

--        INSERT  INTO #TempTable

--        VALUES  ( 500 );

--        DECLARE @sql NVARCHAR(MAX) = 'SELECT \* FROM #TempTable';

--        EXECUTE sp\_executesql @sql;

--    END;

--GO -- Run the previous command and begins new batch

--EXECUTE spTempTableInDynamicSQL;

---- Return 500

--SELECT \* FROM #TempTable;

---- Return Error

Dynamic SQL block can access temp tables created by the calling stored procedure

But the temp tables created by the stored procedure

are not accessible from the query out side of the stored procedure.

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1. Temp Table In Dynamic SQL

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

--T044\_01\_Temp Table In Dynamic SQL

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

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

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

                        AND SPECIFIC\_NAME = 'spTempTableInDynamicSQL' ) )

    BEGIN

        DROP PROCEDURE spTempTableInDynamicSQL;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spTempTableInDynamicSQL

AS

    BEGIN

        DECLARE @sql NVARCHAR(MAX) = 'Create Table #TempTable(Id INT)

                           insert into #TempTable values (500)

                           Select \* from #TempTable';

        EXECUTE sp\_executesql @sql;

    END;

GO -- Run the previous command and begins new batch

EXECUTE spTempTableInDynamicSQL;

GO -- Run the previous command and begins new batch

--Return 500

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2. Life scope of temp Table In Dynamic SQL

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

--T044\_02\_Life scope of temp Table In Dynamic SQL

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

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

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

                        AND SPECIFIC\_NAME = 'spTempTableInDynamicSQL' ) )

    BEGIN

        DROP PROCEDURE spTempTableInDynamicSQL;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spTempTableInDynamicSQL

AS

    BEGIN

        DECLARE @sql NVARCHAR(MAX) = 'Create Table #TempTable(Id INT)

                           insert into #TempTable values (500)';

        EXECUTE sp\_executesql @sql;

        SELECT  \*

        FROM    #TempTable;

    END;

GO -- Run the previous command and begins new batch

EXECUTE spTempTableInDynamicSQL;

GO -- Run the previous command and begins new batch

--Error

/\*

1.

Output as following

--Msg 208, Level 16, State 0, Procedure spTempTableInDynamicSQL, Line 8 [Batch Start Line 60]

--Invalid object name '#TempTable'.

2.

#TempTable created by dynamic SQL is dropped

when the dynamic SQL block in the stored procedure completes execution.

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3. Life scope of temp Table In Dynamic SQL

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

--T044\_03\_Life scope of temp Table In Dynamic SQL

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

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

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

                        AND SPECIFIC\_NAME = 'spTempTableInDynamicSQL' ) )

    BEGIN

        DROP PROCEDURE spTempTableInDynamicSQL;

    END;

GO -- Run the previous command and begins new batch

CREATE PROCEDURE spTempTableInDynamicSQL

AS

    BEGIN

        CREATE TABLE #TempTable ( Id INT );

        INSERT  INTO #TempTable

        VALUES  ( 500 );

        DECLARE @sql NVARCHAR(MAX) = 'SELECT \* FROM #TempTable';

        EXECUTE sp\_executesql @sql;

    END;

GO -- Run the previous command and begins new batch

EXECUTE spTempTableInDynamicSQL;

-- Return 500

SELECT \* FROM #TempTable;

GO -- Run the previous command and begins new batch

-- Return Error

/\*

1.

Output as following.

1.1.

--EXECUTE spTempTableInDynamicSQL;

Return 500

1.2.

-SELECT \* FROM #TempTable;

Error message

--Msg 208, Level 16, State 0, Line 107

--Invalid object name '#TempTable'.

2.

Dynamic SQL block can access temp tables created by the calling stored procedure

But the temp tables created by the stored procedure

are not accessible from the query out side of the stored procedure.

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4. Clean up

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

--T044\_04\_Clean up

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

IF ( EXISTS ( SELECT    \*

              FROM      INFORMATION\_SCHEMA.ROUTINES

              WHERE     ROUTINE\_TYPE = 'PROCEDURE'

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

                        AND SPECIFIC\_NAME = 'spTempTableInDynamicSQL' ) )

    BEGIN

        DROP PROCEDURE spTempTableInDynamicSQL;

    END;

GO -- Run the previous command and begins new batch