**VARIABLES**

**VARIABLE** :

A PLACEHOLDER TO STORE DATA IN MEMORY. TEMPORARY LOCATION USED FOR CALCULATIONS EITHER IN AN SQL BATCH OR IN A FUNCTION OR INSIDE A STORED PROCEDURE.

**SYNTAX FOR CREATING VARIABLE:**

DECLARE @VARIABLE-NAME DATATYPE

**SYNTAX FOR ASSIGNING VALUE TO VARIABLE:**

SET @VARIABLE-NAME = VALUE

**SYNTAX FOR REPORTING VALUE OF VARIABLE:**

SELECT @VARIABLE-NAME

-- EXAMPLE 1:

DECLARE @VAR1 INT

SET @VAR1 = 10

SELECT @VAR1

DECLARE @VAR1 INT

SET @VAR1 = 10

SELECT @VAR1 AS VARIABLE\_VALUE

-- EXAMPLE 2:

DECLARE @VAR2 VARCHAR(30)

SET @VAR2 = 'ABC'

SELECT @VAR2

-- EXAMPLE 3: REPORTS ERROR

BEGIN TRY

DECLARE @VAR3 INT

SET @VAR3 = 'ABC'

SELECT @VAR3

END TRY

BEGIN CATCH

Print ‘ERROR DURING VARIABLE VALUE ASSIGNMENY’

;THROW

END CATCH

TO HANDLE THE ERRORS FROM EXAMPLE #3 ABOVE, WE NEED TO USE TRY..CATCH.. THROW STATEMENT.

**TRY .. CATCH .. THROW**

**TRY** : THIS STATEMENT IS USED TO **DETECT** THE ERRORS INSIDE A BATCH OR UDF OR SPROC.

**CATCH** : THIS STATEMENT IS USED TO **HANDLE** THE ERRORS FROM THE ABOVE "TRY" BLOCK.

**THROW** : THIS STATEMENT IS USED TO **REPORT** THE ACTUAL ERROR FROM THE "TRY" BLOCK.

THIS THROW STATEMENT CAN BE USED ONLY INSIDE THE CATCH BLOCK.

**SYNTAX:**

BEGIN TRY

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…..

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END TRY

BEGIN CATCH

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……

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END CATCH

BEGIN TRY

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…..

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END TRY

BEGIN CATCH

……

……

…..

**;THROW**

END CATCH