**Cursor Examples**

**Example 1 : Cursor + While Loop**

**--\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Tables \_\_\_\_\_\_**

CREATE TABLE customers (

customer\_id int,

customer\_name varchar(255),

customer\_email varchar(255)

);

INSERT INTO customers (customer\_id, customer\_name, customer\_email)VALUES

(1, 'John Smith', 'john.smith@example.com');

(2, 'karam Alim', 'karam@example.com'),

(3, 'Allah Wasaya', 'AllahWasaya@example.com'),

(4, 'Shazad', 'Shazad@example.com')

CREATE TABLE orders (

order\_id int,

order\_date date,

customer\_id int

);

INSERT INTO orders (order\_id, order\_date, customer\_id)

VALUES (1, '2022-01-01', 1);

**--\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Query \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

DECLARE customer\_cursor CURSOR FOR SELECT customer\_id,customer\_name FROM customers;

DECLARE @customer\_id int;

DECLARE @customer\_name varchar(255);

OPEN customer\_cursor;

--\_\_\_\_\_\_\_\_\_\_\_\_ Print Single Single Record \_\_\_\_\_\_\_\_\_\_\_\_

--☻FETCH NEXT FROM customer\_cursor INTO @customer\_id, @customer\_name;

--☻PRINT 'Customer ID: ' + CAST(@customer\_id AS varchar(10)) + ', Customer Name: ' + @customer\_name;

--FETCH NEXT FROM customer\_cursor INTO @customer\_id, @customer\_name;

--PRINT 'Customer ID: ' + CAST(@customer\_id AS varchar(10)) + ', Customer Name: ' + @customer\_name;

--FETCH NEXT FROM customer\_cursor INTO @customer\_id, @customer\_name;

--PRINT 'Customer ID: ' + CAST(@customer\_id AS varchar(10)) + ', Customer Name: ' + @customer\_name;

--\_\_\_\_\_\_\_\_\_\_\_\_ While Loop \_\_\_\_\_\_\_\_\_\_\_\_

FETCH NEXT FROM customer\_cursor INTO @customer\_id, @customer\_name;

PRINT 'Customer ID: ' + CAST(@customer\_id AS varchar(10)) + ', Customer Name: ' + @customer\_name;

print @@FETCH\_STATUS + ' : Status True';

WHILE @@FETCH\_STATUS = 0

BEGIN

PRINT 'Customer ID: ' + CAST(@customer\_id AS varchar(10)) + ', Customer Name: ' + @customer\_name;

FETCH NEXT FROM customer\_cursor INTO @customer\_id, @customer\_name;

print @@FETCH\_STATUS + ' : Status False';

END;

CLOSE customer\_cursor;

DEALLOCATE customer\_cursor;

**Examples 2 : Remove all Table from database -🡪 Cursor**

--\_\_\_\_\_\_\_\_\_\_\_\_\_ Crunt database tables \_\_\_\_\_\_\_\_\_\_\_\_\_

DECLARE @Sql NVARCHAR(500)

DECLARE @Cursor CURSOR

SET @Cursor = CURSOR FAST\_FORWARD FOR -- fast\_formawre for fasted cursor type

SELECT DISTINCT sql = 'ALTER TABLE [' + tc2.TABLE\_SCHEMA + '].[' + tc2.TABLE\_NAME + '] DROP [' + rc1.CONSTRAINT\_NAME + '];'

FROM INFORMATION\_SCHEMA.REFERENTIAL\_CONSTRAINTS rc1

LEFT JOIN INFORMATION\_SCHEMA.TABLE\_CONSTRAINTS tc2 ON tc2.CONSTRAINT\_NAME =rc1.CONSTRAINT\_NAME

OPEN @Cursor FETCH NEXT FROM @Cursor INTO @Sql

WHILE (@@FETCH\_STATUS = 0)

BEGIN

Exec sp\_executesql @Sql

FETCH NEXT FROM @Cursor INTO @Sql

END

CLOSE @Cursor DEALLOCATE @Cursor

GO

EXEC sp\_MSforeachtable 'DROP TABLE ?'

GO

**Examples 3 :** **Drop All , Table , View by Cursor**

DECLARE @schemaName sysname, @tableName sysname, @viewName sysname, @sql nvarchar(max)

--\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Drop all views \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DECLARE viewCursor

CURSOR FOR SELECT TABLE\_SCHEMA, TABLE\_NAME

FROM INFORMATION\_SCHEMA.VIEWS

OPEN viewCursor

FETCH NEXT FROM viewCursor INTO @schemaName, @viewName

WHILE @@FETCH\_STATUS = 0

BEGIN

SET @sql = 'DROP VIEW ' + QUOTENAME(@schemaName) + '.' + QUOTENAME(@viewName)

EXEC sp\_executesql @sql

FETCH NEXT FROM viewCursor INTO @schemaName, @viewName

END

CLOSE viewCursor

DEALLOCATE viewCursor

--\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Drop all tables \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

DECLARE tableCursor

CURSOR FOR SELECT TABLE\_SCHEMA, TABLE\_NAME

FROM INFORMATION\_SCHEMA.TABLES

WHERE TABLE\_TYPE = 'BASE TABLE'

OPEN tableCursor

FETCH NEXT FROM tableCursor INTO @schemaName, @tableName

WHILE @@FETCH\_STATUS = 0

BEGIN

SET @sql = 'DROP TABLE ' + QUOTENAME(@schemaName) + '.' + QUOTENAME(@tableName)

EXEC sp\_executesql @sql

FETCH NEXT FROM tableCursor INTO @schemaName, @tableName

END

CLOSE tableCursor

DEALLOCATE tableCursor