

CTE (Common Table Expressions)

- Create and use Common Table Expressions
- Write queries using temporary tables.
- CTE - vs- Temporary Tables Scope
- Processing records using cursors.

```
WITH CTE_Name(FieldName1,FieldName2,FieldName3)  
AS (SELECT field1,field2,field3 FROM table)  
SELECT FieldName1,FieldName2,FieldName3 FROM CTE_Name
```

Common Table Expressions (CTE)

Temporary result sets

Field data types are determined by the populating query

Must be followed by a `SELECT` query

```
SELECT field1,field2,field3  
INTO #Temporary_Table  
FROM table  
  
SELECT FieldName1,FieldName2,FieldName3  
DROP TABLE #Temporary_Table
```

Temporary Tables

Temporary tables held in memory as long as the connection is open

Must have alias field names

Can be used just as any other table in the database to query data

- Cursors process records one record at a time.
- Consider temp tables or user defined functions to optimize query performance
- Populated using SELECT
- Variables represent the values being processed
- WHILE iterates through the record set
- FETCHNEXT and @@FETCHSTATUS
- CLOSE and DEALLOCATE
- Common Table Expressions (CTE)
 - Syntax
 - Option to JOINS
- Temporary Tables
 - Create, populate, and drop
 - Cursors process records one record at a time.
- Create, open, populate, close
 - WHILE iterates through the recordset
 - FETCHNEXT and @@FETCHSTATUS
 - CLOSE and DEALLOCATE

