

Introduction to T-SQL Queries – Module 9

Kathi Kellenberger

Redgate Software

Module 9: Modifying Data

Creating tables

- CREATE TABLE method

```
CREATE TABLE dbo.NewTable(  
    ID INT NOT NULL,  
    Updated DateTime DEFAULT GETDATE(),  
    Description NVARCHAR(500)  
);
```

- Temp tables, exist only in connection
#tablename
- Global temp tables, can be seen in other connections, not a good idea
##tablename

Creating tables

- SELECT INTO method also adds the data from the query
 - Write a query
 - Add INTO tablename between SELECT and FROM

```
SELECT P.BusinessEntityID, P.FirstName, P.LastName  
INTO dbo.NewPersonTable  
FROM Person.Person AS P;
```

- DROP TABLE tablename
- DROP TABLE IF EXISTS tablename

Data types

- Bit
- Integers (TINYINT, SMALLINT, INT, BIGINT)
- DECIMAL, NUMERIC
- MONEY, SMALL MONEY
- FLOAT, REAL (approximate)
- Date and time (date, datetime, datetime2, datetimeoffset, smalldatetime, time)
- Strings (CHAR, TEXT, VARCHAR, NCHAR, NTEXT, NVARCHAR)
- Binary strings (BINARY, IMAGE, VARBINARY)
- Others (XML, spatial, hierarchyid, uniqueidentifier)

Inserting data

- **INSERT INTO**
 - Good idea to list columns
 - Can be literal values with SELECT or VALUES clause

Can be from a query

```
INSERT INTO dbo.NewPersonTable  
(  
    BusinessEntityID  
    , FirstName  
    , LastName  
)  
VALUES (10000), 'John', 'Smith';
```

```
INSERT INTO dbo.NewPersonTable  
(  
    BusinessEntityID  
    , FirstName  
    , LastName  
)  
SELECT BusinessEntityID, FirstName, LastName  
FROM Person.Person AS P;
```

Deleting data

- DELETE tablename
- Use a WHERE clause and test first!!
- TRUNCATE TABLE
 - Requires more permissions
 - Empties all rows

```
DELETE dbo.NewPersonTable  
WHERE FirstName = 'John';
```

```
TRUNCATE TABLE dbo.NewPersonTable;
```

Update data

- UPDATE/SET

Use a WHERE clause and test first!!

```
UPDATE dbo.NewPersonTable  
SET FirstName = 'Jim'  
WHERE FirstName = 'John';
```


Resources

- [Data types \(Transact-SQL\) - SQL Server | Microsoft Docs](#)