

(T30)討論 SelectInto

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(T30)討論 SelectInto

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-

1. Create Sample Data

```
--=====
--T030_01_Create Sample Data
--=====
--If Table exists then DROP it
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA;
        DROP TABLE PersonA;
    END;
GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'DepartmentA' ) )
    BEGIN
        TRUNCATE TABLE dbo.DepartmentA;
        DROP TABLE DepartmentA;
    END;
GO -- Run the previous command and begins new batch
CREATE TABLE DepartmentA
(
    ID INT PRIMARY KEY ,
    [Name] NVARCHAR(50)
);
GO -- Run the previous command and begins new batch
INSERT INTO DepartmentA
VALUES ( 1, 'DepartmentA01' );
INSERT INTO DepartmentA
VALUES ( 2, 'DepartmentA02' );
INSERT INTO DepartmentA
VALUES ( 3, 'DepartmentA03' );
GO -- Run the previous command and begins new batch
CREATE TABLE PersonA
(
    ID INT PRIMARY KEY ,
    [Name] NVARCHAR(100) ,
    DepartmentID INT FOREIGN KEY REFERENCES DepartmentA ( ID )
);
GO -- Run the previous command and begins new batch
```

```

INSERT INTO PersonA
VALUES ( 1, 'Name01', 1 );
INSERT INTO PersonA
VALUES ( 2, 'Name02', 3 );
INSERT INTO PersonA
VALUES ( 3, 'Name03', 2 );
INSERT INTO PersonA
VALUES ( 4, 'Name04', 2 );
INSERT INTO PersonA
VALUES ( 5, 'Name05', 1 );
GO -- Run the previous command and begins new batch
SELECT * FROM PersonA
SELECT * FROM DepartmentA
GO -- Run the previous command and begins new batch

```

	ID	Name	DepartmentID
1	1	Name01	1
2	2	Name02	3
3	3	Name03	2
4	4	Name04	2
5	5	Name05	1

	ID	Name
1	1	DepartmentA01
2	2	DepartmentA02
3	3	DepartmentA03

2. Select Into

```

=====
--T030_02_Select Into
=====
-----
--T030_02_01
SELECT *
INTO    PersonA2
FROM    PersonA;
SELECT *
FROM    PersonA2;
/*
Copy all columns and rows
from existing table
into a new table.
*/

```

	ID	Name	DepartmentID
1	1	Name01	1
2	2	Name02	3
3	3	Name03	2
4	4	Name04	2
5	5	Name05	1

--T030_02_02

```
SELECT *  
INTO [Sample].dbo.PersonA3  
FROM PersonA;  
SELECT *  
FROM PersonA3;  
/*  
Copy all columns and rows  
from existing table  
into a new table of other database.  
*/
```

	ID	Name	DepartmentID
1	1	Name01	1
2	2	Name02	3
3	3	Name03	2
4	4	Name04	2
5	5	Name05	1

--T030_02_03

```
SELECT ID ,  
[Name]  
INTO PersonA4  
FROM PersonA;  
SELECT *  
FROM PersonA4;  
/*  
Copy selected columns  
from existing table  
into a new table.  
*/
```

--T030_02_04

```
SELECT *  
INTO PersonA5  
FROM PersonA  
WHERE DepartmentID = 1;  
SELECT *  
FROM PersonA5;  
/*  
Copy selected all columns and selected rows  
from existing table  
into a new table.  
*/
```

	ID	Name	DepartmentID
1	1	Name01	1
2	5	Name05	1

--T030_02_05

```
SELECT p.ID ,  
p.[Name] ,  
p.DepartmentID ,  
d.[Name] AS DepartmentName
```

```

INTO      PersonA6
FROM      PersonA p
          INNER JOIN DepartmentA d ON p.DepartmentID = d.ID;

SELECT *
FROM      PersonA6;
/*
Join 2 tables
and copy selected columns and all rows
from existing table
into a new table.
*/

```

	ID	Name	DepartmentID	DepartmentName
1	1	Name01	1	DepartmentA01
2	2	Name02	3	DepartmentA03
3	3	Name03	2	DepartmentA02
4	4	Name04	2	DepartmentA02
5	5	Name05	1	DepartmentA01

```

--T030_02_06

```

```

SELECT *
INTO      PersonA7
FROM      PersonA
WHERE     1 <> 1;

SELECT *
FROM      PersonA7;
/*

```

```

Copy the Table Structure into new Table.
The Table structure includes its columns and datatypes.
Do not copy any records from old table into new table
*/

```

ID	Name	DepartmentID
----	------	--------------

```

--T030_02_07

```

```

SELECT *
INTO      PersonA8
FROM      [N550JKL\SQL2016].[Sample].[dbo].[PersonA];

SELECT *
FROM      PersonA8;
/*

```

```

Copy all columns and all rows
from existing table
into a new table of other database of other SQL server
*/

```

	ID	Name	DepartmentID
1	1	Name01	1
2	2	Name02	3
3	3	Name03	2
4	4	Name04	2
5	5	Name05	1

```

--T030_02_08

```

```

--INSERT INTO .... SELECT

```

```

IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA9' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA9;
        DROP TABLE PersonA9;
    END;
GO -- Run the previous command and begins new batch
CREATE TABLE PersonA9
(
    ID INT PRIMARY KEY ,
    [Name] NVARCHAR(100) ,
    DepartmentID INT
);
GO -- Run the previous command and begins new batch
INSERT INTO PersonA9
( ID ,
  [Name] ,
  DepartmentID
)
SELECT ID ,
       [Name] ,
       DepartmentID
FROM   PersonA;
GO -- Run the previous command and begins new batch
SELECT *
FROM   PersonA9;
/*
SELECT INTO can NOT select data into an existing table.
Need to use INSERT INTO .... SELECT.
Syntax
--INSERT INTO ExistingTable (ColumnList...)
--SELECT ColumnList... FROM SourceTable
*/

```

	ID	Name	DepartmentID
1	1	Name01	1
2	2	Name02	3
3	3	Name03	2
4	4	Name04	2
5	5	Name05	1

3. Clean up

```

=====
--T030_03_Clean up
=====
--If Table exists then DROP it
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA;
        DROP TABLE PersonA;
    END;

```

```

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'DepartmentA' ) )
    BEGIN
        TRUNCATE TABLE dbo.DepartmentA;
        DROP TABLE DepartmentA;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA2' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA2;
        DROP TABLE PersonA2;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA3' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA3;
        DROP TABLE PersonA3;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA4' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA4;
        DROP TABLE PersonA4;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA5' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA5;
        DROP TABLE PersonA5;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA6' ) )
    BEGIN
        TRUNCATE TABLE dbo.PersonA6;
        DROP TABLE PersonA6;
    END;

GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA7' ) )
    BEGIN

```

```
TRUNCATE TABLE dbo.PersonA7;
DROP TABLE PersonA7;
END;
GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA8' ) )
BEGIN
    TRUNCATE TABLE dbo.PersonA8;
    DROP TABLE PersonA8;
END;
GO -- Run the previous command and begins new batch
IF ( EXISTS ( SELECT      *
                FROM        INFORMATION_SCHEMA.TABLES
                WHERE        TABLE_NAME = 'PersonA9' ) )
BEGIN
    TRUNCATE TABLE dbo.PersonA9;
    DROP TABLE PersonA9;
END;
GO -- Run the previous command and begins new batch
```