**Example 29.1**

{ "info": {

"who": "Fred" ,"where": "Microsoft"

,"friends": [{ "name": "Lili", "rank": 5}

,{"name": "Hank", "rank": 7}]} }

**Example 29.2**

USE sample;

CREATE TABLE json\_table

(id INT PRIMARY KEY IDENTITY, person\_and\_friends NVARCHAR(2000));

-- Insert a couple of rows

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info":

{"who": "Fred" ,"where": "SQL Server" ,

"friends": [{ "name": "Lili", "rank": 5} ,{"name": "Hank", "rank": 7}]}}');

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info":{"who": "Tom", "where": "IBM", "friends": [ { "name": "Sharon", "rank": 2},

{"name": "Monty", "rank": 3} ] }}');

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info":{ "who": "Jack", "friends": [ { "name": "Connie" } ] }}');

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info":{ "who": "Joe", "friends": [ { "name": "Doris" }, {"rank": 1} ] }}')

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info": {"who":"Mabel","where":"PostgresSQL","friends":[{"name":"Buck","rank": 6}]}}');

INSERT INTO json\_table (person\_and\_friends) VALUES

(N' {"info":{"who": "Louise", "where": "Hanna" }}');

**Example 29.3**

DECLARE @json NVARCHAR(MAX) =   
 N' {"info":{

"who": "Fred" ,"where": "SQL Server" ,

"friends": [{ "name": "Lili", "rank": 5} ,{"name": "Hank", "rank": 7}]}'

SELECT [key], value FROM OPENJSON(@json, N' $.info.friends');

**Example 29.4**

USE sample;

SELECT dept\_no, dept\_name

FROM department FOR JSON AUTO;

**Example 29.5**

USE sample;

SELECT dept\_no AS [Department.Number], dept\_name AS [Department.Name]

FROM department

FOR JSON PATH, ROOT ('Departments');

**Example 29.6**

USE sample;

SELECT id, person\_and\_friends

FROM json\_table

WHERE ISJSON(person\_and\_friends) > 0;

**Example 29.7**

USE sample;

SELECT Id, JSON\_VALUE(person\_and\_friends, '$.info.where') AS project

FROM json\_table

WHERE ISJSON(person\_and\_friends) > 0

AND JSON\_VALUE(person\_and\_friends, '$.info.who') = 'Fred';

**Example 29.8**

USE sample;

SELECT id, person\_and\_friends,

JSON\_QUERY(person\_and\_friends, '$.info.where')

FROM json\_table;

**Example 29.9**

CREATE TABLE json\_update\_table

(id INT PRIMARY KEY IDENTITY, person\_and\_friends NVARCHAR(2000));

-- Insert a row

INSERT INTO json\_update\_table (person\_and\_friends) VALUES

(N'{"info":{"who": "Fred" , "friends":["Lili", "Hank"]}}');

**Example 29.10**

-- Update the value of the object

UPDATE json\_update\_table

SET person\_and\_friends = json\_modify(person\_and\_friends,

'$.info.who', 'Peter')

WHERE id = 1;

**Example 29.11**

UPDATE json\_update\_table

SET person\_and\_friends= json\_modify(person\_and\_friends,

'append $.info.friends', 'Wendy')

WHERE id = 1;

**Example 29.12**

-- INSERT a new OBJECT

UPDATE json\_update\_table

SET person\_and\_friends = json\_modify(person\_and\_friends,

'$.info.surname', 'Birch')

WHERE id = 1;

**Example 29.13**

UPDATE json\_update\_table

SET person\_and\_friends = json\_modify(person\_and\_friends,

'$.info.surname', NULL)

WHERE id = 1;

**Example 29.14**

UPDATE json\_update\_table

SET person\_and\_friends = json\_modify(person\_and\_friends,

'$.info.friends', NULL)

WHERE id = 1;

UPDATE json\_update\_table

SET person\_and\_friends = json\_modify (person\_and\_friends,

'$.info.friends', 'Lili, Wendy,Hank')

WHERE id = 1;