Выполнила: **Южик Мария Юрьевна**

Группа: **751001**

Вариант: **8**

Лабораторная работа №7

Вывести значения полей [AddressID], [City]из таблицы [Person].[Address] и полей [StateProvinceID] и [CountryRegionCode] из таблицы [Person].[StateProvince] в виде xml, сохраненного в переменную.

Создать хранимую процедуру, возвращающую таблицу, заполненную из xml переменной представленного вида. Вызвать эту процедуру для заполненной на первом шаге переменной.

```sql
use AdventureWorks2012;
go

create procedure XmlToTable(@Data xml)
as
    select
            T.X.value('@ID', 'INT') as AddressID,
            T.X.value('(City/text())[1]', 'NVARCHAR(30)') as City,
            T.X.value('(./Province/@ID)[1]', 'INT') as StateProvinceID,
            T.X.value('(./Province/Region)[1]', 'NVARCHAR(3)') as
CountryRegionCode
    from @Data.nodes('/Addresses/Address') as T(X);
return
go

declare @AddressTable table (
            AddressID int,
            City nvarchar(30),
            StateProvinceID int,
            CountryRegionCode nvarchar(3)
);

declare @XML xml =
(select * from
    (
        select
                1 as Tag,
                null as Parent,
                A.AddressID as [Address!1!ID],
                A.City as [Address!1!City!ELEMENT],
                null as [Province!2!ID] ,
                null as [Province!2!Region!ELEMENT]
        from Person.Address as A
        inner join Person.StateProvince as SP
        on A.StateProvinceID = SP.StateProvinceID
        union all
        select
                2 as Tag,
                1 as Parent,
                A.AddressID,
                null,
                SP.StateProvinceID,
                SP.CountryRegionCode
        from Person.Address as A
        inner join Person.StateProvince as SP
        on A.StateProvinceID = SP.StateProvinceID
    ) as X
```

```sql
                order by [Address!1!ID], [Province!2!ID]
                for XML explicit, root ('Addresses')
    );

    insert into @AddressTable exec XmlToTable @XML;
    select * from @AddressTable;
```

Результаты | **Сообщения**

	AddressID	City	StateProvinceID	CountryRegionCode
1	1	Bothell	79	US
2	2	Bothell	79	US
3	3	Bothell	79	US
4	4	Bothell	79	US
5	5	Bothell	79	US
6	6	Bothell	79	US
7	7	Bothell	79	US
8	8	Bothell	79	US
9	9	Bothell	79	US
10	10	Bothell	79	US
11	11	Bothell	79	US
12	12	Bothell	79	US
13	13	Bothell	79	US
14	14	Bothell	79	US
15	15	Bothell	79	US
16	16	Bothell	79	US
17	17	Bothell	79	US
18	18	Bothell	79	US
19	19	Bothell	79	US
20	20	Bothell	79	US
21	21	Bothell	79	US

✅ Запрос успешно вып... | DESKTOP-0PN3FCA\SQLEXPRESS ...

XML_F52E2B61-18A...0805F49916B1.xml

```xml
<Addresses>
  <Address ID="1">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
  </Address>
  <Address ID="2">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
  </Address>
  <Address ID="3">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
  </Address>
  <Address ID="4">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
  </Address>
  <Address ID="5">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
  </Address>
  <Address ID="6">
    <City>Bothell</City>
    <Province ID="79">
      <Region>US</Region>
    </Province>
```

110 %