## Задание №1

Вывести значения полей [CreditCardID], [CardType], [CardNumber] из таблицы [Sales].[CreditCard] в виде xml, сохраненного в переменную. Формат xml должен соответствовать примеру:

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

Создание хранимой процедуры:

```
-- create a stored procedure for filling a table with XML values
   6 ⊡create procedure Sales.ReadCardsFromXML @xmlValues XML
   7
        select CreditCardID = xmlNode.value(N'@ID', 'int')
   8 🗀
   9
              , CardType = xmlNode.value(N'@Type', 'nvarchar(50)')
              , CardNumber = xmlNode.value(N'@Number', 'nvarchar(25)')
  10
           from @xmlValues.nodes(N'/CreditCards/Card') as XML(xmlNode);
  11
  12
       go
 - + -(
Messages
Commands completed successfully.
Completion time: 2020-11-01T19:25:30.2106753+03:00
```

Выборка значений из таблицы в XML:

```
-- select values into XML
     17 ⊡declare @xmlRes XML;
     18
     19 set @xmlRes =
            (select CreditCardID as N'@ID'
     20
                  , CardType as N'@Type'
     21
                   , CardNumber as N'@Number'
     22
               from Sales.CreditCard
     23
            for XML path(N'Card'), root(N'CreditCards'));
     24
     25
     26
           select @xmlRes;
     27
     28
           -- exec the procedure to check
     29
121 % ▼ <
Results 🗐 Messages
    (No column name)
    <CreditCards><Card ID="1" Type="SuperiorCard" Nu...</p>
```

```
<Card ID="1" Type="SuperiorCard" Number="33332664695310" />
 2
       <Card ID="2" Type="Distinguish" Number="55552127249722" />
 3
 4
       <Card ID="3" Type="ColonialVoice" Number="77778344838353" />
 5
       <Card ID="4" Type="ColonialVoice" Number="77774915718248" />
       <Card ID="5" Type="Vista" Number="11114404600042" />
 6
       <Card ID="6" Type="Distinguish" Number="55557132036181" />
 7
       <Card ID="7" Type="Distinguish" Number="55553635401028" />
 8
       <Card ID="8" Type="SuperiorCard" Number="33336081193101" />
9
       <Card ID="9" Type="Distinguish" Number="55553465625901" />
10
       <Card ID="10" Type="SuperiorCard" Number="33332126386493" />
11
       <Card ID="11" Type="SuperiorCard" Number="33335352517363" />
12
       <Card ID="12" Type="SuperiorCard" Number="33334316194519" />
13
       <Card ID="13" Type="Vista" Number="11119775847802" />
14
       <Card ID="14" Type="Distinguish" Number="55553287727410" />
15
16
       <Card ID="15" Type="SuperiorCard" Number="33336866065599" />
       <Card ID="16" Type="Vista" Number="11111985451507" />
17
       <Card ID="17" Type="ColonialVoice" Number="77771220960729" />
18
       <Card ID="18" Type="ColonialVoice" Number="77773971683137" />
19
       <Card ID="19" Type="ColonialVoice" Number="77779803886862" />
20
       <Card ID="20" Type="SuperiorCard" Number="33332150058339" />
21
       <Card ID="21" Type="SuperiorCard" Number="33336474467548" />
22
23
       <Card ID="22" Type="ColonialVoice" Number="77772030376004" />
       <Card ID="23" Type="Vista" Number="11117174633569" />
24
       <Card ID="24" Type="Vista" Number="11111658051128" />
25
       <Card ID="25" Type="Vista" Number="11119905436490" />
26
       <Card ID="26" Type="Distinguish" Number="55554195847998" />
27
28
       <Card ID="27" Type="SuperiorCard" Number="33333837392825" />
       <Card ID="28" Type="SuperiorCard" Number="33337040086193" />
29
30
       <Card ID="29" Type="SuperiorCard" Number="33333594431481" />
       <Card ID="30" Type="Vista" Number="11111281844021" />
31
32
       <Card ID="31" Type="Vista" Number="11112040199986" />
       <Card ID="32" Type="Distinguish" Number="55552506272209" />
33
34
       <Card ID="33" Type="SuperiorCard" Number="33335588002748" />
       <Card ID="34" Type="Vista" Number="11115274414475" />
35
       <Card ID="35" Type="SuperiorCard" Number="33333028993903" />
36
37
       <Card ID="36" Type="Vista" Number="11111169772836" />
       <Card ID="37" Type="Distinguish" Number="55551349750603" />
38
       <Card ID="38" Type="Distinguish" Number="55555420711099" />
39
       <Card ID="39" Type="Vista" Number="11117546738833" />
40
       <Card ID="40" Type="Distinguish" Number="55555841603354" />
41
       <Card ID="41" Type="Vista" Number="11113757706549" />
42
       <Card ID="42" Type="Distinguish" Number="55555053963314" />
43
       <Card ID="43" Type="SuperiorCard" Number="33332773200339" />
44
       <Card ID="44" Type="ColonialVoice" Number="77779171924785" />
45
       <Card ID="45" Type="Distinguish" Number="55551983685258" />
46
       <Card ID="46" Type="SuperiorCard" Number="33331306076760" />
47
       <Card ID="47" Type="Distinguish" Number="55551566702747" />
48
```

## Выполнение процедуры с полученным ХМL:

```
-- select values into XML
          ⊡declare @xmlRes XML;
       17
       18
       19 🗀 set @xmlRes =
                (select CreditCardID as N'@ID'
       20
                        , CardType as N'@Type'
       21
                        , CardNumber as N'@Number'
       22
                    from Sales.CreditCard
       23
                for XML path(N'Card'), root(N'CreditCards'));
       24
       25
       26
             select @xmlRes;
       27
       28
             -- exec the procedure to check
       29
             exec Sales.ReadCardsFromXML @xmlRes
       30
       31
       32
121 % + 4

    ⊞ Results

           Messages
      (No column name)
      <CreditCards><Card ID="1" Type="SuperiorCard" Nu..</p>
      CreditCardID
                  CardType
                              CardNumber
     1
                             33332664695310
                  SuperiorCard
 2
                  Distinguish
                               55552127249722
      3
                  ColonialVoice 77778344838353
 3
                  ColonialVoice 77774915718248
 5
      5
                  Vista
                               11114404600042
      6
                  Distinguish
                               55557132036181
 6
      7
                               55553635401028
 7
                  Distinguish
                  SuperiorCard 33336081193101
      8
 8
 9
      9
                  Distinguish
                               55553465625901
                  SuperiorCard 33332126386493
 10
      10
                  SuperiorCard 33335352517363
      11
 11
      12
                  SuperiorCard
                               33334316194519
 12
                  Vista
                               11119775847802
 13
      13
                               55553287727410
      14
                  Distinguish
 14
                  SuperiorCard 33336866065599
 15
      15
      16
                  Vista
                               11111985451507
 16
      17
                  ColonialVoice 77771220960729
 17
                  ColonialVoice 77773971683137
      18
 18
      19
                  ColonialVoice
                               77779803886862
 19
      20
 20
                  SuperiorCard 33332150058339
      21
                  SuperiorCard 33336474467548
 21
                  ColonialVoice
                               77772030376004
 22
      22
      23
                  Vista
                               11117174633569
 23
      24
                  Vista
                               11111658051128
 24
                  Vista
 25
      25
                               11119905436490
                               55554195847998
 26
                  Distinguish
                  SuperiorCard 33333837302825

    Query executed successfully.
```