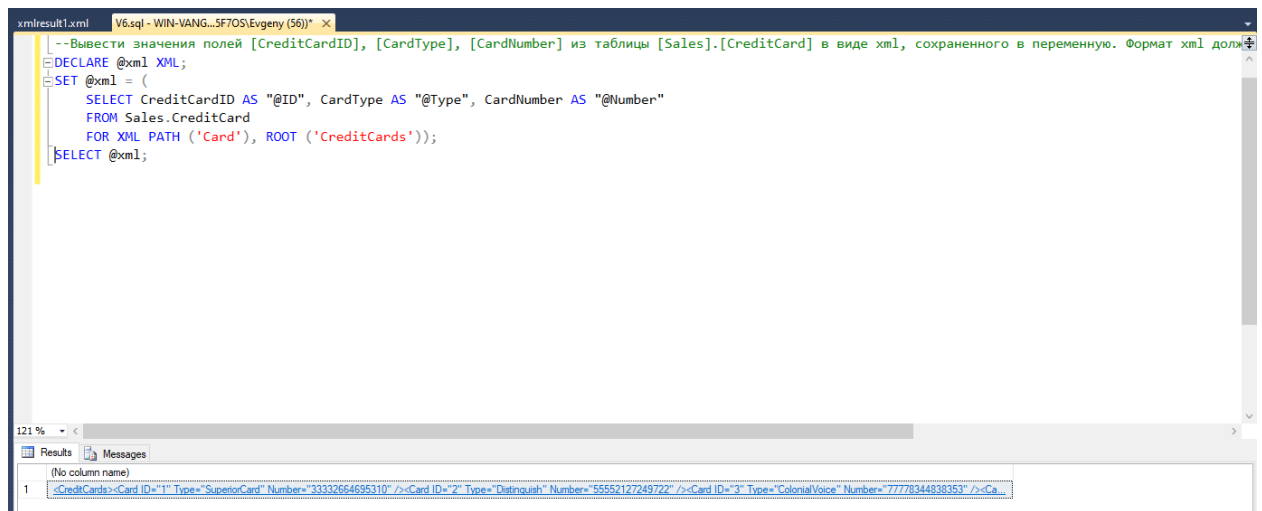


Отчет ЛР 7

Тимохов Евгений, 751001, вариант 6

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

```
<CreditCards>
  <Card ID="1" Type="SuperiorCard" Number="33332664695310" />
  <Card ID="2" Type="Distinguish" Number="55552127249722" />
</CreditCards>
```




The screenshot shows a SQL query in the 'Query Editor' window of SQL Server Enterprise Manager. The query is designed to output XML data from the [Sales].[CreditCard] table. The query text is as follows:

```
--Вывести значения полей [CreditCardID], [CardType], [CardNumber] из таблицы [Sales].[CreditCard] в виде xml, сохраненного в переменную. Формат xml должен соответствовать примеру.
DECLARE @xml XML;
SET @xml = (
    SELECT CreditCardID AS "@ID", CardType AS "@Type", CardNumber AS "@Number"
    FROM Sales.CreditCard
    FOR XML PATH ('Card'), ROOT ('CreditCards'));
SELECT @xml;
```

The 'Results' pane at the bottom shows the output of the query, which is an XML document. The first row of the result is:

```
<CreditCards><Card ID="1" Type="SuperiorCard" Number="33332664695310" /><Card ID="2" Type="Distinguish" Number="55552127249722" /><Card ID="3" Type="ColonialVoice" Number="77778344838353" /><Ca
```



The screenshot shows the full XML result of the query in the 'Results' pane. The XML document is a root element named 'CreditCards' containing 45 'Card' elements. Each 'Card' element has attributes for 'ID', 'Type', and 'Number'. The types of cards include 'SuperiorCard', 'Distinguish', 'ColonialVoice', and 'Vista'. The numbers are 15-digit integers. The XML is formatted with indentation for readability.

```
<CreditCards>
  <Card ID="1" Type="SuperiorCard" Number="33332664695310" />
  <Card ID="2" Type="Distinguish" Number="55552127249722" />
  <Card ID="3" Type="ColonialVoice" Number="77778344838353" />
  <Card ID="4" Type="ColonialVoice" Number="77774915718248" />
  <Card ID="5" Type="Vista" Number="11114404600042" />
  <Card ID="6" Type="Distinguish" Number="55557132036181" />
  <Card ID="7" Type="Distinguish" Number="55553635401028" />
  <Card ID="8" Type="SuperiorCard" Number="33336081193101" />
  <Card ID="9" Type="Distinguish" Number="55553465625901" />
  <Card ID="10" Type="SuperiorCard" Number="33332126386493" />
  <Card ID="11" Type="SuperiorCard" Number="33335352517363" />
  <Card ID="12" Type="SuperiorCard" Number="33334316194519" />
  <Card ID="13" Type="Vista" Number="11119775847802" />
  <Card ID="14" Type="Distinguish" Number="55553287727410" />
  <Card ID="15" Type="SuperiorCard" Number="33336866065599" />
  <Card ID="16" Type="Vista" Number="11111985451507" />
  <Card ID="17" Type="ColonialVoice" Number="77771220960729" />
  <Card ID="18" Type="ColonialVoice" Number="77773971683137" />
  <Card ID="19" Type="ColonialVoice" Number="77779803886862" />
  <Card ID="20" Type="SuperiorCard" Number="33332150058339" />
  <Card ID="21" Type="SuperiorCard" Number="33336474467548" />
  <Card ID="22" Type="ColonialVoice" Number="77772030376004" />
  <Card ID="23" Type="Vista" Number="11117174633569" />
  <Card ID="24" Type="Vista" Number="11111658051128" />
  <Card ID="25" Type="Vista" Number="11119905436490" />
  <Card ID="26" Type="Distinguish" Number="55554195847998" />
  <Card ID="27" Type="SuperiorCard" Number="33333837392825" />
  <Card ID="28" Type="SuperiorCard" Number="33337040086193" />
  <Card ID="29" Type="SuperiorCard" Number="33333594431481" />
  <Card ID="30" Type="Vista" Number="11111281844021" />
  <Card ID="31" Type="Vista" Number="11112040199986" />
  <Card ID="32" Type="Distinguish" Number="55552506272209" />
  <Card ID="33" Type="SuperiorCard" Number="3333558002748" />
  <Card ID="34" Type="Vista" Number="11115274414475" />
  <Card ID="35" Type="SuperiorCard" Number="33333028993903" />
  <Card ID="36" Type="Vista" Number="1111169772836" />
  <Card ID="37" Type="Distinguish" Number="55551349750603" />
  <Card ID="38" Type="Distinguish" Number="55555420711099" />
  <Card ID="39" Type="Vista" Number="11117546738833" />
  <Card ID="40" Type="Distinguish" Number="55555841603354" />
  <Card ID="41" Type="Vista" Number="11113757706549" />
  <Card ID="42" Type="Distinguish" Number="55555053963314" />
  <Card ID="43" Type="SuperiorCard" Number="33332773200339" />
  <Card ID="44" Type="ColonialVoice" Number="77779171924785" />
  <Card ID="45" Type="Distinguish" Number="55551983685258" />
```

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

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane displays the 'AdventureWorks2012' database structure, with 'Stored Procedures' expanded and 'dbo.GetCreditCards' highlighted. The main window shows a SQL script in a text editor. The script is in Russian and defines a stored procedure named 'GetCreditCards' that takes an XML parameter '@CreditCardsXml XML'. The procedure uses 'x.value' to extract 'CreditCardID', 'CardType', and 'CardNumber' from the XML and inserts them into a table. The 'Messages' pane at the bottom shows the command completed successfully.

```
--Создать хранимую процедуру, возвращающую таблицу, заполненную из xml переменной представленн

CREATE PROCEDURE dbo.GetCreditCards(@CreditCardsXml XML)
AS
BEGIN
SELECT
    x.value('@ID', 'INT') AS CreditCardID,
    x.value('@Type', 'VARCHAR(50)') AS CardType ,
    x.value('@Number', 'VARCHAR(25)') AS CardNumber
FROM @CreditCardsXML.nodes('/CreditCards/Card') XmlData(x);
END;
```

121 %
Messages
Command(s) completed successfully.

The screenshot shows a SQL query being executed in the same environment. The query declares an XML variable '@xml', sets it to a SELECT statement that pulls data from the 'Sales.CreditCard' table and converts it to XML, and then executes the 'dbo.GetCreditCards' stored procedure with this XML variable. Below the query, the 'Results' pane displays a table with 12 rows of data. The status bar at the bottom indicates the query was executed successfully and returned 19118 rows.

```
DECLARE @xml XML;
SET @xml = (
    SELECT CreditCardID AS "@ID", CardType AS "@Type", CardNumber AS "@Number"
    FROM Sales.CreditCard
    FOR XML PATH ('Card'), ROOT ('CreditCards'));
EXEC dbo.GetCreditCards @xml;
```

	CreditCardID	CardType	CardNumber
1	1	SuperiorCard	33332664695310
2	2	Distinguish	55552127249722
3	3	ColonialVoice	77778344838353
4	4	ColonialVoice	77774915718248
5	5	Vista	11114404600042
6	6	Distinguish	55557132036181
7	7	Distinguish	55553635401028
8	8	SuperiorCard	33336081193101
9	9	Distinguish	55553465625901
10	10	SuperiorCard	33332126386493
11	11	SuperiorCard	33335352517363
12	12	SuperiorCard	33334316194519

Query executed successfully. WIN-VANGNA5F70S\SQLEXPRESS ... WIN-VANGNA5F70S\Evgeny... AdventureWorks2012 00:00:00 19118 rows