

# Лабораторная работа №7

## 7 вариант

Вывести значения полей **[ProductID]**, **[Name]** из таблицы **[Production].[Product]** и полей **[ProductModelID]** и **[Name]** из таблицы **[Production].[ProductModel]** в виде xml, сохраненного в переменную. Формат xml должен соответствовать примеру:

```
1  <Products>
2    <Product ID="680">
3      <Name>HL Road Frame - Black, 58</Name>
4      <Model ID="6">
5        <Name>HL Road Frame</Name>
6      </Model>
7    </Product>
8    <Product ID="706">
9      <Name>HL Road Frame - Red, 58</Name>
10     <Model ID="6">
11       <Name>HL Road Frame</Name>
12     </Model>
13   </Product>
14 </Products>
```

Создать временную таблицу и заполнить её данными из переменной, содержащей xml.

Создание и установка значения переменной:

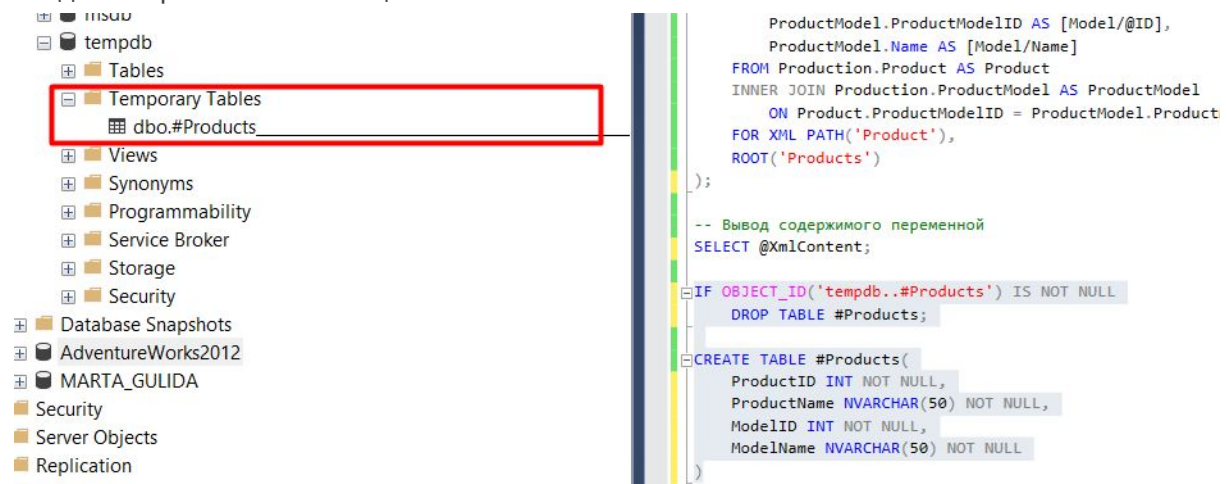
```
DECLARE @XmlContent XML;

SET @XmlContent = (
    SELECT
        Product.ProductID AS [@ID],
        Product.Name AS [Name],
        ProductModel.ProductModelID AS [Model/@ID],
        ProductModel.Name AS [Model/Name]
    FROM Production.Product AS Product
    INNER JOIN Production.ProductModel AS ProductModel
        ON Product.ProductModelID = ProductModel.ProductModelID
    FOR XML PATH('Product'),
    ROOT('Products')
);
```

Вывод содержимого переменной:

```
<Products>
  <Product ID="680">
    <Name>HL Road Frame - Black, 58</Name>
    <Model ID="6">
      <Name>HL Road Frame</Name>
    </Model>
  </Product>
  <Product ID="706">
    <Name>HL Road Frame - Red, 58</Name>
    <Model ID="6">
      <Name>HL Road Frame</Name>
    </Model>
  </Product>
  <Product ID="707">
    <Name>Sport-100 Helmet, Red</Name>
    <Model ID="33">
      <Name>Sport-100</Name>
    </Model>
  </Product>
  <Product ID="708">
    <Name>Sport-100 Helmet, Black</Name>
    <Model ID="33">
      <Name>Sport-100</Name>
    </Model>
  </Product>
  <Product ID="709">
    <Name>Mountain Bike Socks, M</Name>
    <Model ID="18">
      <Name>Mountain Bike Socks</Name>
    </Model>
  </Product>
</Products>
```

Создание временной таблицы:



```
ProductModel.ProductModelID AS [Model/@ID],
ProductModel.Name AS [Model/Name]
FROM Production.Product AS Product
INNER JOIN Production.ProductModel AS ProductModel
ON Product.ProductModelID = ProductModel.Product
FOR XML PATH('Product'),
ROOT('Products')
);

-- Вывод содержимого переменной
SELECT @XmlContent;

IF OBJECT_ID('tempdb..#Products') IS NOT NULL
    DROP TABLE #Products;

CREATE TABLE #Products(
    ProductID INT NOT NULL,
    ProductName NVARCHAR(50) NOT NULL,
    ModelID INT NOT NULL,
    ModelName NVARCHAR(50) NOT NULL
)
```

Вставка содержимого во временную таблицу с переменной:

```
INSERT INTO #Products(
    ProductID,
    ProductName,
    ModelID,
    ModelName
)
SELECT
    ProductID = node.value('(/@ID)[1]', 'INT'),
    ProductName = node.value('(/Name)[1]', 'NVARCHAR(50)'),
    ModelID = node.value('(/Model/@ID)[1]', 'INT'),
    ModelName = node.value('(/Model/Name)[1]', 'NVARCHAR(50)')
FROM @XmlContent.nodes('/Products/Product') AS XML(node);
GO
```

Вывод содержимого временной таблицы:

SELECT \* FROM #Products;

82 %

ResultsMessages

	ProductID	ProductName	ModelID	ModelName
1	680	HL Road Frame - Black, 58	6	HL Road Frame
2	706	HL Road Frame - Red, 58	6	HL Road Frame
3	707	Sport-100 Helmet, Red	33	Sport-100
4	708	Sport-100 Helmet, Black	33	Sport-100
5	709	Mountain Bike Socks, M	18	Mountain Bike Socks
6	710	Mountain Bike Socks, L	18	Mountain Bike Socks
7	711	Sport-100 Helmet, Blue	33	Sport-100
8	712	AWC Logo Cap	2	Cycling Cap
9	713	Long-Sleeve Logo Jersey, S	11	Long-Sleeve Logo Jersey
10	714	Long-Sleeve Logo Jersey, M	11	Long-Sleeve Logo Jersey

Query executed successfully.

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