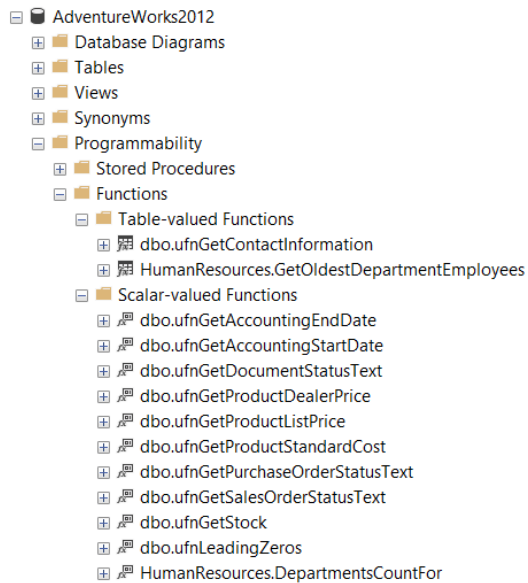


## Задание 1

- A) Создайте scalar-valued функцию, которая будет принимать в качестве входного параметра имя группы отделов (HumanResources.Department.GroupName) и возвращать количество отделов, входящих в эту группу.
- B) Создайте inline table-valued функцию, которая будет принимать в качестве входного параметра id отдела (HumanResources.Department.DepartmentID), а возвращать 3 самых старших сотрудника, которые начали работать в отделе с 2005 года.



- C) Вызовите функцию для каждого отдела, применив оператор CROSS APPLY.

Results		Messages								
	DepartmentID	Name	GroupName	ModifiedDate	BusinessEntityID	NationalIDNumber	LoginID	OrganizationNode	OrganizationLevel	JobTitle
1	1	Engineering	Research and Development	2002-06-01 00:00:00.000	15	56920285	adventure-works\sharon0	0x5AE7	3	Design Engineer
2	1	Engineering	Research and Development	2002-06-01 00:00:00.000	14	42487730	adventure-works\michael0	0x5AE5	3	Senior Design Engineer
3	2	Tool Design	Research and Development	2002-06-01 00:00:00.000	11	974026903	adventure-works\lovidiu0	0x5AE3	3	Senior Tool Designer
4	2	Tool Design	Research and Development	2002-06-01 00:00:00.000	13	486228782	adventure-works\janice0	0x5AE368	4	Tool Designer
5	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	274	502097814	adventure-works\stephen0	0x9560	2	North American Sales Manager
6	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	287	982310417	adventure-works\amy0	0x95E0	2	European Sales Manager
7	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	277	615389812	adventure-works\jillian0	0x956F	3	Sales Representative
8	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	20	323403273	adventure-works\wanida0	0x6C20	2	Marketing Assistant
9	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	19	52541318	adventure-works\mary2	0x6BC0	2	Marketing Assistant
10	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	18	222969461	adventure-works\john5	0x6B40	2	Marketing Specialist
11	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	261	280633567	adventure-works\reinout0	0x85EBAE	4	Purchasing Assistant
12	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	260	437296311	adventure-works\annette0	0x85EBAA	4	Purchasing Assistant
13	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	250	895209680	adventure-works\sheela0	0x85EB	3	Purchasing Manager
14	8	Production...	Manufacturing	2002-06-01 00:00:00.000	224	621209647	adventure-works\william0	0x7BDA	3	Scheduling Assistant
15	16	Executive	Executive General and Ad...	2002-06-01 00:00:00.000	234	184188301	adventure-works\laura1	0x84	1	Chief Financial Officer

Query executed successfully. DESKTOP-MVQ5JU7\SQLEXPRESS ... DESKTOP-MVQ5JU7\NegaTi... AdventureWorks2012 00:00:00 15 rows

Вызовите функцию для каждого отдела, применив оператор OUTER APPLY.

Results Messages										
	DepartmentID	Name	GroupName	ModifiedDate	BusinessEntityID	NationalIDNumber	LoginID	OrganizationNode	OrganizationLevel	JobTitle
1	1	Engineering	Research and Development	2002-06-01 00:00:00.000	15	56920285	adventure-works\sharon0	0x5AE7	3	Director of Engineering
2	1	Engineering	Research and Development	2002-06-01 00:00:00.000	14	42487730	adventure-works\michael8	0x5AE5	3	Senior Engineer
3	2	Tool Design	Research and Development	2002-06-01 00:00:00.000	11	974026903	adventure-works\ovidiu0	0x5AE3	3	Senior Engineer
4	2	Tool Design	Research and Development	2002-06-01 00:00:00.000	13	486228782	adventure-works\janice0	0x5AE368	4	Tool Design Engineer
5	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	274	502097814	adventure-works\stephen0	0x9560	2	National Sales Lead
6	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	287	982310417	adventure-works\amy0	0x95E0	2	Senior Salesperson
7	3	Sales	Sales and Marketing	2002-06-01 00:00:00.000	277	615389812	adventure-works\jillian0	0x956F	3	Senior Salesperson
8	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	20	323403273	adventure-works\wanida0	0x6C20	2	Marketing Assistant
9	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	19	52541318	adventure-works\mary2	0x6BC0	2	Marketing Assistant
10	4	Marketing	Sales and Marketing	2002-06-01 00:00:00.000	18	222969461	adventure-works\john5	0x6B40	2	Marketing Assistant
11	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	261	280633567	adventure-works\reinout0	0x85EBAE	4	Purchasing Assistant
12	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	260	437296311	adventure-works\annette0	0x85EBAA	4	Purchasing Assistant
13	5	Purchasing	Inventory Management	2002-06-01 00:00:00.000	250	895209680	adventure-works\sheela0	0x85EB	3	Purchasing Assistant
14	6	Research and Development	Research and Development	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
15	7	Production	Manufacturing	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
16	8	Production Control	Manufacturing	2002-06-01 00:00:00.000	224	621209647	adventure-works\william0	0x7BDA	3	Senior Production Control
17	9	Human Resources	Executive General and Administration	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
18	10	Finance	Executive General and Administration	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
19	11	Information Services	Executive General and Administration	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
20	12	Document Control	Quality Assurance	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
21	13	Quality Assurance	Quality Assurance	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
22	14	Facilities and Maintenance	Executive General and Administration	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
23	15	Shipping and Receiving	Inventory Management	2002-06-01 00:00:00.000	NULL	NULL	NULL	NULL	NULL	N/A
24	16	Executive	Executive General and Administration	2002-06-01 00:00:00.000	234	184188301	adventure-works\laura1	0x84	1	Chief Executive Officer

<

>

Query executed successfully.

DESKTOP-MVQ5JU7\SQLEXPRESS ...

DESKTOP-MVQ5JU7\NegaTi...

AdventureWorks2012

00:00:00

24 rows

D) Измените созданную inline table-valued функцию, сделав ее multistatement table-valued (предварительно сохранив для проверки код создания inline table-valued функции).

Current connection parameters	
Database	AdventureWorks2012
Server	DESKTOP-MVQ5JU7\SQLEXPRESS
User	DESKTOP-MVQ5JU7\NegaTiV
Description	
Created date	11/29/2020 8:46 PM
Execute as	Caller
Name	GetOldestDepartmentEmployees
Schema	HumanResources
System object	False
Options	
ANSI NULLs	True
Encrypted	False
Function type	Multistatement table-valued
Is inlineable	False
Marked for inlining	Cannot read property InlineType. This property is not available on SQL Server 2012.
Quoted identifier	True
Schema bound	False
Uses native compilation	Cannot read property IsNativelyCompiled. This property is not available on SQL Server 2012.