

Лабораторная работа №6

7 вариант

Создайте хранимую процедуру, которая будет возвращать сводную таблицу (оператор **PIVOT**), отображающую данные о количестве сотрудников (**HumanResources.Employee**) работающих в определенную смену (**HumanResources.Shift**). Вывести информацию необходимо для каждого отдела (**HumanResources.Department**). Список названий смен передайте в процедуру через входной параметр.

```
IF OBJECT_ID (N'dbo.uspGetEmpCountByShift') IS NOT NULL
    DROP PROCEDURE dbo.uspGetEmpCountByShift;
GO

CREATE PROCEDURE dbo.uspGetEmpCountByShift (@Shifts NVARCHAR(MAX))
AS
    DECLARE @sql NVARCHAR(MAX) = ''
BEGIN
    SET @sql = '
    SELECT * FROM (
        SELECT
            Employee.BusinessEntityID,
            Department.Name AS DepName,
            HumanResourcesShift.Name AS ShiftName
        FROM HumanResources.EmployeeDepartmentHistory AS EmployeeDepartmentHistory
        INNER JOIN HumanResources.Employee AS Employee
            ON EmployeeDepartmentHistory.BusinessEntityID = Employee.BusinessEntityID
        INNER JOIN HumanResources.Department AS Department
            ON EmployeeDepartmentHistory.DepartmentID = Department.DepartmentID
        INNER JOIN HumanResources.Shift AS HumanResourcesShift
            ON EmployeeDepartmentHistory.ShiftID = HumanResourcesShift.ShiftID
        WHERE EmployeeDepartmentHistory.EndDate IS NULL
    ) AS DepShiftTable
    PIVOT (
        COUNT(BusinessEntityID) FOR ShiftName IN ('+ @Shifts + ')
    ) AS EmpCountShiftTable;
    '
    EXECUTE sp_executesql @sql;
END
GO
```

Результат создания:

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Databases

- System Databases
- Database Snapshots
- AdventureWorks2012
 - Database Diagrams
 - Tables
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Stored Procedures
 - System Stored Procedures
 - dbo.uspGetBillOfMaterials
 - dbo.uspGetEmpCountByShift**
 - dbo.uspGetEmployeeManagers
 - dbo.uspGetManagerEmployees
 - dbo.uspGetWhereUsedProductID
 - dbo.uspLogError
 - dbo.uspPrintError
 - dbo.uspSearchCandidateResumes
 - HumanResources.uspUpdateEmployeeHireInfo
 - HumanResources.uspUpdateEmployeeLogin
 - HumanResources.uspUpdateEmployeePersonalInfo
 - Functions
 - Database Triggers
 - Assemblies
 - Types
 - Rules
 - Defaults
 - Plan Guides

```

-- Список названий смен передайте в процедуру через входной параметр.
*/
IF OBJECT_ID (N'dbo.uspGetEmpCountByShift') IS NOT NULL
    DROP PROCEDURE dbo.uspGetEmpCountByShift;
GO

CREATE PROCEDURE dbo.uspGetEmpCountByShift (@Shifts NVARCHAR(MAX))
AS
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    SET @sql = '
    SELECT * FROM (
        SELECT
            Employee.BusinessEntityID,
            Department.Name AS DepName,
            HumanResourcesShift.Name AS ShiftName
        FROM HumanResources.EmployeeDepartmentHistory AS EmployeeDepartmentHistory
        INNER JOIN HumanResources.Employee AS Employee
            ON EmployeeDepartmentHistory.BusinessEntityID = Employee.BusinessEntityID
        INNER JOIN HumanResources.Department AS Department
            ON EmployeeDepartmentHistory.DepartmentID = Department.DepartmentID
        INNER JOIN HumanResources.Shift AS HumanResourcesShift
            ON EmployeeDepartmentHistory.ShiftID = HumanResourcesShift.ShiftID
        WHERE EmployeeDepartmentHistory.EndDate IS NULL
    ) AS DepShiftTable
    PIVOT (
        COUNT(BusinessEntityID) FOR ShiftName IN ('+ @Shifts + ')
    ) AS EmpCountShiftTable;

    EXECUTE sp_executesql @sql;
END
GO
  
```

82 %

Messages

Commands completed successfully.

Completion time: 2020-11-01T19:12:55.6945996+03:00

Результат вызова хранимой процедуры:

```
-- Вызов хранимой процедуры
EXECUTE dbo.uspGetEmpCountByShift '[Day],[Evening],[Night]';
```

82 %

Results Messages

	DepName	Day	Evening	Night
1	Document Control	3	1	1
2	Engineering	6	0	0
3	Executive	2	0	0
4	Facilities and Maintenance	3	2	2
5	Finance	10	0	0
6	Human Resources	6	0	0
7	Information Services	9	1	0
8	Marketing	9	0	0
9	Production	79	54	46
10	Production Control	4	1	1
11	Purchasing	12	0	0
12	Quality Assurance	4	1	1
13	Research and Developm...	4	0	0
14	Sales	18	0	0

Query executed successfully.

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