Лабораторная работа №2

Вариант 6

Задание 1.1

```sql
/*Select the earliest employee start date in each department*/
SELECT d.Name, MIN(e.HireDate) 'StartDate'
FROM HumanResources.Employee e
INNER JOIN HumanResources.EmployeeDepartmentHistory ed ON ed.BusinessEntityID = e.BusinessEntityID
INNER JOIN HumanResources.Department d ON d.DepartmentID = ed.DepartmentID
GROUP BY d.Name;
```

100 %

Results | Messages

	Name	StartDate
1	Document Control	2003-01-17
2	Engineering	2001-12-12
3	Executive	2003-02-15
4	Facilities and Maintenance	2003-01-15
5	Finance	2003-01-19
6	Human Resources	2003-01-07
7	Information Services	2003-01-05
8	Marketing	2001-02-26
9	Production	2000-07-31
10	Production Control	2003-01-02
11	Purchasing	2002-01-20
12	Quality Assurance	2003-01-10
13	Research and Development	2003-01-30
14	Sales	2005-02-04
15	Shipping and Receiving	2003-01-08
16	Tool Design	2002-01-05

Задание 1.2

```sql
/*Select all employees with job title 'Stocker' and their ShiftIndex*/
SELECT e.BusinessEntityID, e.JobTitle, s.ShiftID 'ShiftName'
FROM HumanResources.Employee e
INNER JOIN HumanResources.EmployeeDepartmentHistory ed ON ed.BusinessEntityID = e.BusinessEntityID
INNER JOIN HumanResources.Shift s ON s.ShiftID = ed.ShiftID
WHERE e.JobTitle = 'Stocker';
```

100 %

Results | Messages

	BusinessEntityID	JobTitle	ShiftName
1	122	Stocker	2
2	124	Stocker	3
3	126	Stocker	1

Задание 1.3

```sql
/* Select all employees with current department and replace 'and' on '&' in JobTitle */
SELECT e.BusinessEntityID, REPLACE(e.JobTitle, 'and', '&') 'Job Title', d.Name 'DepName'
FROM HumanResources.Employee e
INNER JOIN HumanResources.EmployeeDepartmentHistory ed ON ed.BusinessEntityID = e.BusinessEntityID
INNER JOIN HumanResources.Department d ON d.DepartmentID = ed.DepartmentID
WHERE ed.EndDate IS NULL;
```

100 %

⊞ Results | 📄 Messages

	BusinessEntityID	Job Title	DepName
1	1	Chief Executive Officer	Executive
2	2	Vice President of Engineering	Engineering
3	3	Engineering Manager	Engineering
4	4	Senior Tool Designer	Tool Design
5	5	Design Engineer	Engineering
6	6	Design Engineer	Engineering
7	7	Research & Development Manager	Research and Development

Задание 2.1

```sql
/*a) создайте таблицу dbo.Person с такой же структурой как Person.Person,
кроме полей xml, uniqueidentifier, не включая индексы, ограничения и триггеры;*/
CREATE TABLE dbo.Person (
    BusinessEntityID INT NOT NULL,
    PersonType NCHAR(2) NOT NULL,
    NameStyle BIT NOT NULL,
    Title NVARCHAR(8) NULL,
    FirstName NVARCHAR(50) NOT NULL,
    MiddleName NVARCHAR(50) NULL,
    LastName NVARCHAR(50) NOT NULL,
    Suffix NVARCHAR(10) NULL,
    EmailPromotion INT NOT NULL,
    ModifiedDate DATETIME NOT NULL
)
```

100 %

📄 Messages

```
Commands completed successfully.

Completion time: 2019-09-17T15:59:35.4898588+03:00
```

Задание 2.2

```sql
/*b) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person
составной первичный ключ из полей BusinessEntityID и PersonType*/
ALTER TABLE dbo.Person
ADD CONSTRAINT PK_Person PRIMARY KEY (BusinessEntityID, PersonType);
```

00 %

Messages

```
Commands completed successfully.

Completion time: 2019-09-17T16:03:25.4653660+03:00
```

Задание 2.3

```sql
/*c) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person ограничение для
поля PersonType, чтобы заполнить его можно было только значениями из списка 'GC','SP','EM','IN','VC','SC';*/
ALTER TABLE dbo.Person
ADD CONSTRAINT CheckType CHECK (PersonType IN ('GC','SP','EM','IN','VC','SC'));
```

100 %

Messages

```
Commands completed successfully.

Completion time: 2019-09-17T16:04:17.8538893+03:00
```

Задание 2.4

```sql
/*d) используя инструкцию ALTER TABLE, создайте для таблицы dbo.Person ограничение
DEFAULT для поля Title, задайте значение по умолчанию 'n/a';*/
ALTER TABLE dbo.Person
ADD CONSTRAINT DF_Person_Title DEFAULT 'n/a' FOR Title;
```

100 %

Messages

```
Commands completed successfully.

Completion time: 2019-09-17T16:05:10.7899575+03:00
```

Задание 2.5

```sql
/*e) заполните таблицу dbo.Person данными из Person.Person только для тех лиц, для которых тип
контакта в таблице ContactType определен как 'Owner'. Поле Title заполните значениями по умолчанию;*/
INSERT INTO dbo.Person (
    BusinessEntityID,
    PersonType,
    NameStyle,
    FirstName,
    MiddleName,
    LastName ,
    Suffix,
    EmailPromotion,
    ModifiedDate)
SELECT
    p.BusinessEntityID,
    p.PersonType,
    p.NameStyle,
    p.FirstName,
    p.MiddleName,
    p.LastName,
    p.Suffix,
    p.EmailPromotion,
    p.ModifiedDate
FROM Person.Person p
INNER JOIN Person.BusinessEntityContact bc ON bc.PersonID = p.BusinessEntityID
INNER JOIN Person.ContactType c ON c.ContactTypeID = bc.ContactTypeID
WHERE c.Name = 'Owner';
```

100 %

▣ Messages

```
(266 rows affected)

Completion time: 2019-09-17T16:05:45.2848170+03:00
```

Задание 2.6

```sql
/*f) измените размерность поля Title, уменьшите размер поля до 4-ти символов,
также запретите добавлять null значения для этого поля.*/
ALTER TABLE dbo.Person
ALTER COLUMN Title NVARCHAR(4) NOT NULL;
```

100 %

▣ Messages

```
Commands completed successfully.

Completion time: 2019-09-17T16:06:48.9321327+03:00
```