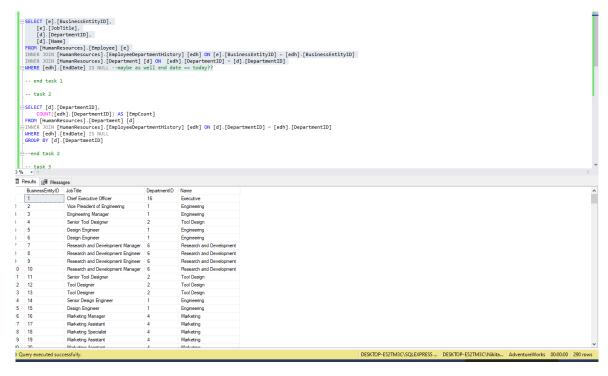
Биткин Н.С., гр. 751001.

Лабораторная №2, Вариант 3.

Задание 2.1

Задание 2.1.1



Задача 2.1.2.

```
SELECT [d].[DepartmentID],
     COUNT([edh].[DepartmentID]) AS [EmpCount]
FROM [HumanResources].[Department] [d]
    INNER JOIN [HumanResources].[EmployeeDepartmentHistory] [edh] ON [d].[DepartmentID] = [edh].[DepartmentID]

WHERE [edh].[EndDate] IS NULL

GROUP BY [d].[DepartmentID]
   ⊢--end task 2
-- task 3
Results Messages
      DepartmentID EmpCount
     1
                    4
      2
3
     3
                     18
     4
                    9
5
      5
                    12
6
      6
                    4
      7
                     179
8
      8
                    6
9
      9
                    6
 10
     10
                     10
 11
      11
                     10
 12
      12
                    5
 13
      13
 14
      14
 15
      15
                    6
 16
      16
```

Задача 2.1.3

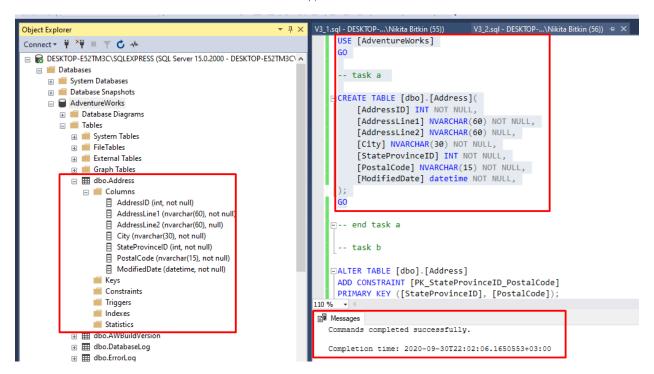
```
-- end task 3

    ■ Results    ■ Messages

                                                                  RateChangeDate
2003-02-15 00:00:00.000
     Chief Executive Officer
                                                  125.50
                                                                                                   The rate for Chief Executive Officer was set to 125.50 at 15 Feb 2003
                                                                                                   The rate for Vice President of Engineering was set to 63.46 at 03 Mar 2002
The rate for Engineering Manager was set to 43.27 at 12 Dec 2001
      Vice President of Engineering
Engineering Manager
                                                      63 4615
                                                                  2002-03-03 00:00:00.000
                                                                  2001-12-12 00:00:00.000
                                                      43.2692
       Senior Tool Designer
                                                      8.62
                                                                  2002-01-05 00:00:00.000
                                                                                                   The rate for Senior Tool Designer was set to 8.62 at 05 Jan 2002
                                                     23.72
       Senior Tool Designer
                                                                  2004-07-01 00:00:00.000
2006-01-15 00:00:00.000
                                                                                                   The rate for Senior Tool Designer was set to 23.72 at 01 Jul 2004
                                                                                                    The rate for Senior Tool Designer was set to 29.85 at 15 Jan 2006
       Senior Tool Designer
                                                      29.8462
      Design Engineer
Design Engineer
                                                                                                   The rate for Design Engineer was set to 32.69 at 06 Feb 2002
The rate for Design Engineer was set to 32.69 at 24 Feb 2002
                                                      32 6923 2002-02-06 00:00:00 000
                                                                                                   The rate for Research and Development Manager was set to 50.48 at 12 Mar 2003. The rate for Research and Development Engineer was set to 40.87 at 30 Jan 2003. The rate for Research and Development Engineer was set to 40.87 at 17 Feb 2003.
       Research and Development Manager 50.4808 2003-03-12 00:00:00.000
       Research and Development Engineer
Research and Development Engineer
                                                     40.8654 2003-01-30 00:00:00.000
40.8654 2003-02-17 00:00:00.000
       Research and Development Manager
                                                     42.4808 2003-06-04 00:00:00.000
                                                                                                   The rate for Research and Development Manager was set to 42.48 at 04 Jun 2003
       Senior Tool Designer
                                                      28.8462 2005-01-05 00:00:00.000
                                                                                                    The rate for Senior Tool Designer was set to 28.85 at 05 Jan 2005
                                                                  2002-01-11 00:00:00.000
                                                                                                   The rate for Tool Designer was set to 25.00 at 11 Jan 2002
       Tool Designer
                                                     25.00
25.00
      Tool Designer
Senior Design Engineer
                                                                                                   The rate for Tool Designer was set to 25.00 at 23 Jan 2005
The rate for Senior Design Engineer was set to 36.06 at 30 Jan 2005
                                                                  2005-01-23 00:00:00.000
                                                      36.0577
                                                                  2005-01-30 00:00:00.000
      Design Engineer
Marketing Manager
                                                                                                   The rate for Design Engineer was set to 32.69 at 18 Feb 2005
The rate for Marketing Manager was set to 24.00 at 20 Jan 2002
The rate for Marketing Manager was set to 28.75 at 16 Aug 2003
                                                     32.6923 2005-02-18 00:00:00.000
                                                                   2002-01-20 00:00:00.000
                                                                  2003-08-16 00:00:00.000
       Marketing Manager
                                                                   2006 06 01 00:00:00 000
                                                                                                   The este for Madratina Manager was get to 27.50 at 01 km 2000
Query executed successfully.
                                                                                                                                                                                                          DESKTOP-E52TM3C\SQLEXPRESS ... | DESKTOP-E52TM3C\Nikita... | AdventureWorks | 00:00:00 | 316 rows
```

Залание 2.2.

Задание а.



Задания b, c, d

```
V3_1.sql - DESKTOP-...\Nikita Bitkin (55))
                                                                                                                 V3_2.sql - DESKTOP-...\Nikita Bitkin (56)) → ×
bject Explorer
Connect ▼ * ♥ ■ ▼ 🖒 🚸
□ R DESKTOP-E52TM3C\SQLEXPRESS (SQL Server 15.0.2000 - DESKTOP-E52TM3C\ ∧
  □ ■ Databases
     ALTER TABLE [dbo].[Address]
      Database Snapshots
                                                                               ADD CONSTRAINT [PK_StateProvinceID_PostalCode]
PRIMARY KEY ([StateProvinceID], [PostalCode]);

    Database Diagrams

☐ | Tables

                                                                                 - end task b
           \mathrm 📕 System Tables
           -- task c
           External Tables
                                                                               ALTER TABLE [dbo].[Address]
           Graph Tables
                                                                               ADD CONSTRAINT [CH_PostalCode]
CHECK ([PostalCode] LIKE '%[^A-Za-zA-Яa-я]%');
           ☐ Columns
                     AddressID (int, not null)
                                                                                -- end task c
                     AddressLine1 (nvarchar(60), not null)
                     AddressLine2 (nvarchar(60), null)
                                                                               -- task d
                     City (nvarchar(30), not null)
                                                                               ALTER TABLE [dbo].[Address]
ADD CONSTRAINT [DF_ModifiedDate]
DEFAULT GETDATE() FOR [ModifiedDate];
                    - StateProvinceID (PK, int, not null)
                    - PostalCode (PK, nvarchar(15), not null)
                    -- end task d
                     → PK_StateProvinceID_PostalCode
                    Constraints
                                                                          100 % - 4
                    [B] CH_PostalCode

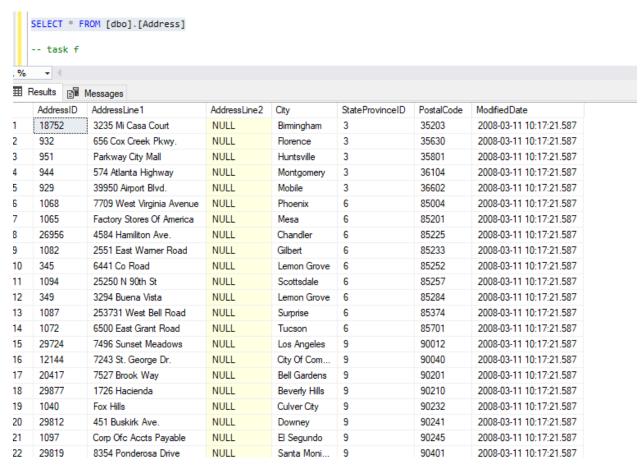
    Messages

☐ DF_ModifiedDate

                                                                             Commands completed successfully.
                    Triggers
              Completion time: 2020-09-30T22:03:06.4444301+03:00
                    - PK_StateProvinceID_PostalCode (Clustered)
                   III PK_StateProvinceID_PostalCode
            alle a Descharation
```

Задание е.

```
☐INSERT INTO [dbo].[Address] (
       [AddressID],
       [AddressLine1].
       [AddressLine2],
       [City],
       [StateProvinceID],
       [PostalCode],
       [ModifiedDate])
  SELECT
      [temp].[AddressID],
       [temp].[AddressLine1],
       [temp].[AddressLine2],
       [temp].[City],
       [temp].[StateProvinceID],
       [temp].[PostalCode],
      [temp].[ModifiedDate]
  FROM
      (SELECT
      [a].[AddressID],
       [a].[AddressLine1],
      [a].[AddressLine2],
       [a].[City],
      [a].[StateProvinceID],
       [a].[PostalCode],
      [a].[ModifiedDate],
        AX([a].[AddressID]) OVER(PARTITION BY [a].[StateProvinceID], [a].[PostalCode]) AS [MaxAddressID]
      FROM [Person].[Address] [a]
      INNER JOIN [Person].[StateProvince] [sp] ON [a].[StateProvinceID] = [sp].[StateProvinceID]
      WHERE [sp].[CountryRegionCode] ='US' AND [a].[PostalCode] LIKE '%[^A-Za-zA-Яa-я]%'
       ) AS [temp]
  WHERE [temp].[AddressID] = [temp].[MaxAddressID];
  -- end task e
     + 4
Messages
Completion time: 2020-09-30T22:29:35.9661713+03:00
```



Задание f.

🚃 ناموانا امناف

☐ Columns

Keys Constraints Triggers Indexes Statistics

AddressID (int, not null)

City (nvarchar(20), null) → StateProvinceID (PK, int, not null)

⊞ HumanResources.Employee

HumanResources.EmployeeDepartmentHistory

AddressLine1 (nvarchar(60), not null)

- PostalCode (PK, nvarchar(15), not null) ModifiedDate (datetime, not null)

AddressLine2 (nvarchar(60), null)

