

# REPORT FOR TASK 2, VARIANT # 8

## 1. First subtask:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL code:

```
1 USE AdventureWorks2012;
2 GO
3
4 -- First subtask
5 SELECT [Emp1].[BusinessEntityID], [Emp1].[OrganizationLevel], [Emp1].[JobTitle], [JC].[JobCandidateID], [JC].[Resume]
6 FROM [HumanResources].[Employee] AS [Emp1]
7 INNER JOIN [HumanResources].[JobCandidate] AS [JC]
8 ON [Emp1].[BusinessEntityID] = [JC].[BusinessEntityID]
9 WHERE [JC].[Resume] IS NOT NULL;
10
11 -- Second subtask
12 SELECT [Dep].[DepartmentID], [Dep].[Name], COUNT(*) AS [EmpCount]
13 FROM [HumanResources].[Department] AS [Dep]
14 INNER JOIN [HumanResources].[EmployeeDepartmentHistory] AS [EDH]
15 ON [Dep].[DepartmentID] = [EDH].[DepartmentID]
```

The Results pane shows two tables of data:

BusinessEntityID	OrganizationLevel	JobTitle	JobCandidateID	Resume
274	2	North American Sales Manager	4	<a href="http://schemas.microsoft.com/sqlserver/2004/07/adv...">Cns Resume.xmlns ns="http://schemas.microsoft.com/sqlserver/2004/07/adv...</a>
212	3	Quality Assurance Supervisor	8	<a href="http://schemas.microsoft.com/sqlserver/2004/07/adv...">Cns Resume.xmlns ns="http://schemas.microsoft.com/sqlserver/2004/07/adv...</a>

DepartmentID	Name	EmpCount
3	Sales	18
5	Purchasing	12
7	Production	179

Name	HireDate	SickLeaveHours	AccumulativeSum
Document Control	2003-01-17	58	58
Document Control	2003-02-05	58	116
Document Control	2003-02-23	59	175
Document Control	2003-03-13	59	234
Document Control	2003-04-07	57	291
Engineering	2001-12-12	21	21
Engineering	2002-02-06	22	43
Engineering	2002-02-24	23	66
Engineering	2002-03-03	20	86
Engineering	2005-01-30	21	107
Engineering	2005-02-18	22	129
Executive	2003-02-15	69	69

The status bar indicates the query was executed successfully.

## 2. Second subtask:

a:

The screenshot shows the Microsoft SQL Server Management Studio interface. The query window displays the following SQL code:

```
1 USE ALEXEY_KOSYUK;
2 GO
3
4 -- First subtask
5 DROP TABLE [dbo].[Address];
6
7 CREATE TABLE [dbo].[Address] (
8     [AddressID] INT NOT NULL PRIMARY KEY,
9     [AddressLine1] NVARCHAR(60) NOT NULL,
10    [AddressLine2] NVARCHAR(60) NULL,
11    [City] NVARCHAR(30) NOT NULL,
12    [StateProvinceID] INT NOT NULL,
13    [PostalCode] NVARCHAR(15) NOT NULL,
14    [ModifiedDate] DATETIME NOT NULL
15 );
16
17 GO
18
```

The Object Explorer shows the database structure for ALEXEY\_KOSYUK, including tables, columns, keys, and constraints. The Columns list for the Address table is highlighted:

- AddressID (PK, int, not null)
- AddressLine1 (nvarchar(60), not null)
- AddressLine2 (nvarchar(60), null)
- City (nvarchar(30), not null)
- StateProvinceID (int, not null)
- PostalCode (nvarchar(15), not null)
- ModifiedDate (datetime, not null)

The Messages pane shows the command completed successfully.

The status bar indicates the query was executed successfully.

The screenshot displays the Microsoft SQL Server Enterprise Studio interface. The top menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The toolbar contains various icons for file operations, query execution, and window management. The 'Object Explorer' on the left shows the database structure for 'LT-BY-AKOSYUK (SQL Server 14.0.1000.169 - AM(akosyuk))', including Databases, System Databases, Database Snapshots, AdventureWorks2012, ALEXEY\_KOSYUK, Database Diagrams, Tables, System Tables, FileTables, External Tables, Graph Tables, and Columns. The 'Query Editor' in the center shows a T-SQL script for a table named 'Address'. The script includes comments for 'First subtask' and 'Second subtask', and uses the 'GO' command to separate the statements. The 'Messages' pane at the bottom shows the execution results, indicating that the commands completed successfully. The status bar at the bottom displays 'Query executed successfully.' and 'LT-BY-AKOSYUK (14.0 RTM) AM(akosyuk (52)) ALEXEY\_KOSYUK 00:00:00 0 rows'.

```

1 USE ALEXEY_KOSYUK;
2 GO
3
4 -- First subtask
5 DROP TABLE [dbo].[Address];
6
7 CREATE TABLE [dbo].[Address] (
8     [AddressID] INT NOT NULL PRIMARY KEY,
9     [AddressLine1] NVARCHAR(60) NOT NULL,
10    [AddressLine2] NVARCHAR(60) NULL,
11    [City] NVARCHAR(30) NOT NULL,
12    [StateProvinceID] INT NOT NULL,
13    [PostalCode] NVARCHAR(15) NOT NULL,
14    [ModifiedDate] DATETIME NOT NULL
15 );
16
17 -- Second subtask
18 ALTER TABLE [dbo].[Address]
19     ADD [ID] INT IDENTITY(1, 1) UNIQUE;
20
21 GO
22

```

Messages

Commands completed successfully.

Completion time: 2019-10-05T22:33:24.4472782+03:00

Query executed successfully.

LT-BY-AKOSYUK (14.0 RTM) AM(akosyuk (52)) ALEXEY\_KOSYUK 00:00:00 0 rows

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The top menu bar includes File, Edit, View, Query, Project, Tools, Window, and Help. The top toolbar contains various icons for file operations and query execution. The top status bar shows the connection: 'VB2\_sql - LT-BY-AKOSYUK.ALEXEY\_KOSYUK (52) - Microsoft SQL Server Management Studio'. The top right corner has a search icon and the text 'Quick Launch (Ctrl+Q)'. The Object Explorer on the left shows the database structure for 'ALEXEY\_KOSYUK'. The central pane displays the SQL script for creating and altering the 'Address' table. The bottom status bar indicates the query was executed successfully on the 'ALEXEY\_KOSYUK' database.

Object Explorer

- Connect
  - LT-BY-AKOSYUK (SQL Server 14.0.1000.169 - AM\akosyuk)
    - Databases
      - System Databases
      - Database Snapshots
      - AdventureWorks2012
      - ALEXEY\_KOSYUK
        - Database Diagrams
        - Tables
          - System Tables
          - FileTables
          - External Tables
          - Graph Tables
          - dbo.Address
            - Columns
              - AddressID (PK, int, not null)
              - AddressLine1 (nvarchar(60), not null)
              - AddressLine2 (nvarchar(60), null)
              - City (nvarchar(30), not null)
              - StateProvinceID (int, not null)
              - PostalCode (nvarchar(15), not null)
              - ModifiedDate (datetime, not null)
              - ID (int, not null)
            - Keys
            - Constraints
              - CH\_Address\_StateProvinceID
            - Triggers
            - Indexes
            - Statistics
            - sales.Orders
            - Views
            - External Resources
            - Synonyms
            - Programmability
            - Service Broker
            - Storage
            - Security

VB2\_sql - LT-BY-A..K (AM\akosyuk (52))

```

4  -- First subtask
5  DROP TABLE [dbo].[Address];
6
7  CREATE TABLE [dbo].[Address] (
8    [AddressID] INT NOT NULL PRIMARY KEY,
9    [AddressLine1] NVARCHAR(60) NOT NULL,
10   [AddressLine2] NVARCHAR(60) NULL,
11   [City] NVARCHAR(30) NOT NULL,
12   [StateProvinceID] INT NOT NULL,
13   [PostalCode] NVARCHAR(15) NOT NULL,
14   [ModifiedDate] DATETIME NOT NULL
15 );
16
17 -- Second subtask
18 ALTER TABLE [dbo].[Address]
19 ADD [ID] INT IDENTITY(1, 1) UNIQUE;
20
21 -- Third subtask
22 ALTER TABLE [dbo].[Address]
23 ADD CONSTRAINT [CH_Address_StateProvinceID] CHECK([StateProvinceID] % 2 = 1);
24
25 GO
26

```

100 %

Messages

Commands completed successfully.

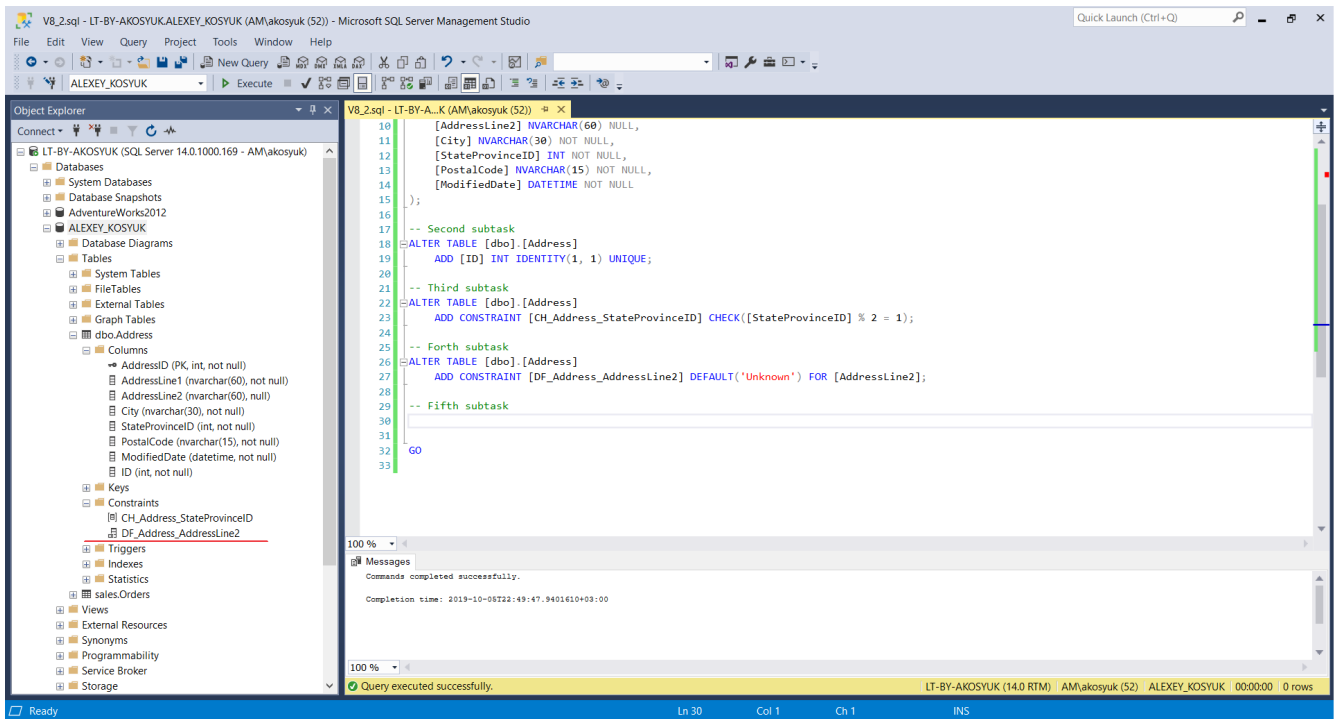
Completion time: 2019-10-05T22:39:32.7816380+03:00

100 %

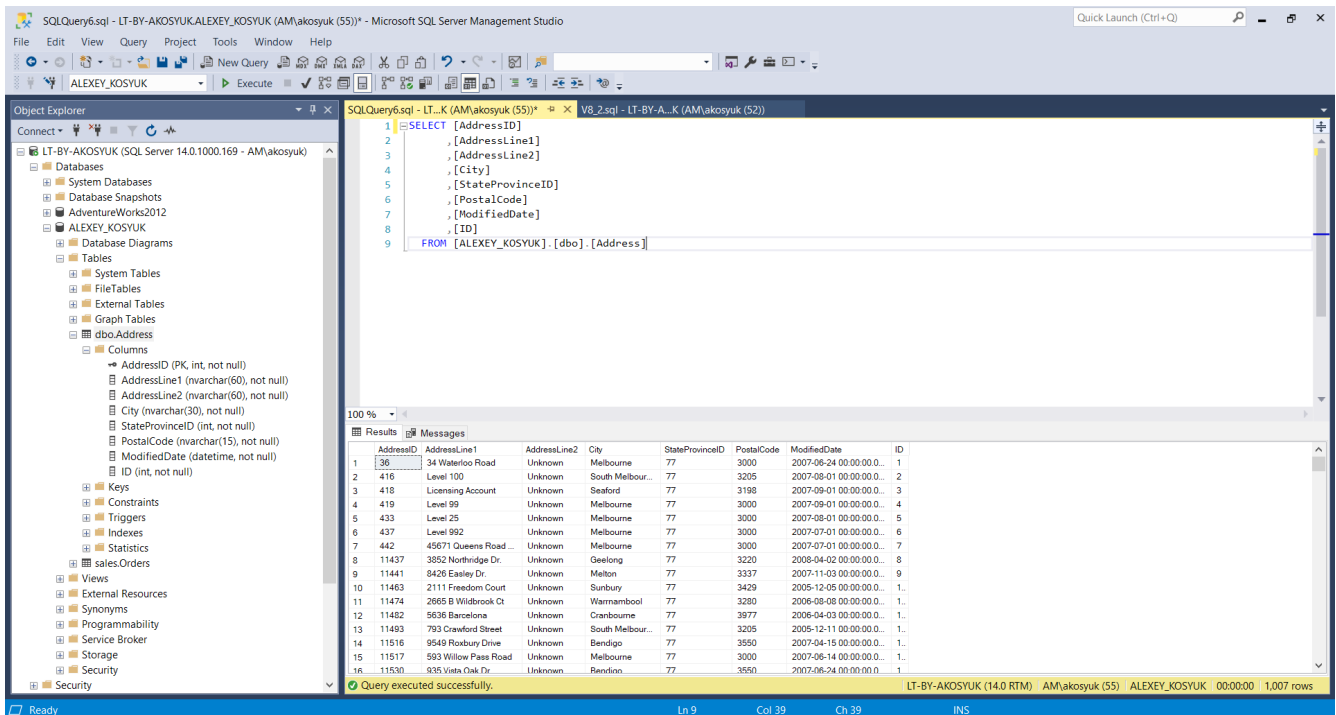
Query executed successfully.

LT-BY-AKOSYUK (14.0 RTM) AM\akosyuk (52) ALEXEY\_KOSYUK 00:00:00 0 rows

d:



e:



f:

Microsoft SQL Server Management Studio interface showing a query execution window.

**Object Explorer:** LT-BY-AKOSYUK (SQL Server 14.0.1000.169 - AM\akosyuk)

- Databases
  - System Databases
  - Database Snapshots
  - AdventureWorks2012
  - ALEXEY\_KOSYUK
    - Database Diagrams
    - Tables
      - System Tables
      - FileTables
      - External Tables
      - Graph Tables
      - dbo.Address
        - Columns
          - AddressID (PK, int, not null)
          - AddressLine1 (nvarchar(60), not null)
          - AddressLine2 (nvarchar(60), not null)
          - City (nvarchar(30), not null)
          - StateProvinceID (int, not null)
          - PostalCode (nvarchar(15), not null)
          - ModifiedDate (datetime, not null)
          - ID (int, not null)
        - Keys
        - Constraints
        - Triggers
        - Indexes
        - Statistics
      - sales.Orders
    - Views
    - External Resources
    - Synonyms
    - Programmability
    - Service Broker
    - Storage
    - Security

**Query Window (V8\_2.sql - LT-BY-A...K (AM\akosyuk (52))):**

```
27 ADD CONSTRAINT [DF_Address_AddressLine2] DEFAULT('Unknown') FOR [AddressLine2];
28
29 -- Fifth subtask
30 INSERT INTO [dbo].[Address] (
31     [AddressID],
32     [AddressLine1],
33     [City],
34     [StateProvinceID],
35     [PostalCode],
36     [ModifiedDate]
37 )
38 SELECT [Adr].[AddressID]
39     , [Adr].[AddressLine1]
40     , [Adr].[City]
41     , [Adr].[StateProvinceID]
42     , [Adr].[PostalCode]
43     , [Adr].[ModifiedDate]
44 FROM [AdventureWorks2012].[Person].[Address] AS [Adr]
45 INNER JOIN [AdventureWorks2012].[Person].[StateProvince] AS [SP]
46 ON [Adr].[StateProvinceID] = [SP].[StateProvinceID] AND [Adr].[StateProvinceID] % 2 = 1
47 INNER JOIN [AdventureWorks2012].[Person].[CountryRegion] AS [CR]
48 ON [CR].[CountryRegionCode] = [SP].[CountryRegionCode]
49
50 -- Sixth subtask
51 ALTER TABLE [dbo].[Address]
52 ALTER COLUMN [AddressLine2] NVARCHAR(60) NOT NULL;
53
54 GO
55
```

**Messages:**

Commands completed successfully.

Completion time: 2019-10-04T00:07:28.8660909+03:00

100 %

Query executed successfully. LT-BY-AKOSYUK (14.0 RTM) | AM\akosyuk (52) | ALEXEY\_KOSYUK | 00:00:00 | 0 rows