

REPORT FOR TASK 3, VARIANT # 8

1. First subtask:

- a

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'ALEXEY_KOSYUK'. The main window shows a SQL query script for creating a table named 'Address' in the 'dbo' schema. The script includes a 'USE' statement, a 'GO' command, an 'ALTER TABLE' statement to add a 'PersonName' column, and a 'DECLARE' statement for a table variable. The table variable is then populated with data using an 'INSERT INTO' statement. The Messages pane at the bottom shows the execution results, indicating that 6 rows were affected and the query executed successfully.

```
1 USE ALEXEY_KOSYUK;
2 GO
3
4 -- a
5 ALTER TABLE [dbo].[Address]
6 ADD [PersonName] NVARCHAR(100);
7
8 -- b
9 DECLARE @addressVariable TABLE
10 (
11 [AddressID] INT NOT NULL PRIMARY KEY,
12 [AddressLine1] NVARCHAR(60) NOT NULL,
13 [AddressLine2] NVARCHAR(60) NOT NULL,
14 [City] NVARCHAR(30) NOT NULL,
15 [StateProvinceID] INT NOT NULL,
16 [PostalCode] NVARCHAR(15) NOT NULL,
17 [ModifiedDate] DATETIME NOT NULL,
18 [ID] INT NOT NULL UNIQUE,
19 [PersonName] NVARCHAR(100) NULL
20 );
21
22 INSERT INTO @addressVariable
23 (
24 [AddressID],
25 [AddressLine1],
26 [AddressLine2],
27 [City],
28 [StateProvinceID],
```

Messages

(6 rows affected)

Completion time: 2019-10-20T03:44:33.0698298+03:00

100 %

Query executed successfully.

LT-BY-AKOSYUK (14.0 RTM) AM\akosyuk (59) ALEXEY_KOSYUK 00:00:00 0 rows

- b, c

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'ALEXEY_KOSYUK'. The main window shows a SQL query script for selecting the top 1000 rows from the 'Address' table. The script includes a 'USE' statement, a 'GO' command, and a 'SELECT TOP (1000)' statement. The query results are displayed in the Results pane at the bottom, showing a list of rows with columns: AddressID, AddressLine1, AddressLine2, City, StateProvinceID, PostalCode, ModifiedDate, ID, and PersonName. The Messages pane at the bottom shows the execution results, indicating that 1,000 rows were returned and the query executed successfully.

```
1 /***** Script for SelectTopRows command from SSRS *****/
2 SELECT TOP (1000) [AddressID]
3 , [AddressLine1]
4 , [AddressLine2]
5 , [City]
6 , [StateProvinceID]
7 , [PostalCode]
8 , [ModifiedDate]
9 , [ID]
10 , [PersonName]
11 FROM [ALEXEY_KOSYUK].[dbo].[Address]
```

Results

AddressID	AddressLine1	AddressLine2	City	StateProvinceID	PostalCode	ModifiedDate	ID	PersonName
36	34 Waterloo Road	AU, Victoria, Bendigo	Melbourne	77	3000	2007-06-24 00:00:00.000	1	Craig Sanz
11437	3852 Northridge Dr.	AU, Victoria, South Melbour...	Geelong	77	3220	2008-04-02 00:00:00.000	8	Victor Gom...
11441	8426 Easley Dr.	AU, Victoria, Bendigo	Melton	77	3337	2007-11-03 00:00:00.000	9	Craig Sanz
11463	2111 Freedom Court	AU, Victoria, South Melbour...	Sunbury	77	3429	2005-12-05 00:00:00.000	1.	Victor Gom...
11474	2665 B Wildbrook Ct	AU, Victoria, Bendigo	Warrnambool	77	3280	2006-08-08 00:00:00.000	1.	Craig Sanz
11482	5636 Barcelona	AU, Victoria, South Melbour...	Carlsruhe	77	3977	2006-04-03 00:00:00.000	1.	Victor Gom...
11493	793 Crawford Street	AU, Victoria, Bendigo	South Melbour...	77	3205	2005-12-11 00:00:00.000	1.	Craig Sanz
11516	9549 Roxbury Drive	AU, Victoria, South Melbour...	Bendigo	77	3550	2007-04-15 00:00:00.000	1.	Victor Gom...
11517	593 Willow Pass Road	AU, Victoria, Bendigo	Melbourne	77	3000	2007-06-14 00:00:00.000	1.	Craig Sanz
11530	935 Vista Oak Dr	AU, Victoria, South Melbour...	Bendigo	77	3550	2007-06-24 00:00:00.000	1.	Victor Gom...
11541	7330 Saddlehill Lane	AU, Victoria, Bendigo	Sunbury	77	3429	2005-07-15 00:00:00.000	1.	Craig Sanz
11542	4055 Leonard Ct	AU, Victoria, South Melbour...	Warrnambool	77	3280	2008-03-30 00:00:00.000	1.	Victor Gom...
11567	7596 Valley View Ro.	AU, Victoria, Bendigo	Sunbury	77	3429	2007-02-18 00:00:00.000	1.	Craig Sanz
11574	3847 Vista Valley Rd	AU, Victoria, South Melbour...	Hobart	71	7001	2005-01-16 00:00:00.000	2.	Victor Gom...
11598	5324 Horseshoe Circ.	AU, Victoria, Bendigo	Melbourne	77	3000	2005-12-21 00:00:00.000	2.	Craig Sanz
11599	9995 All Ways Drive	AU, Victoria, South Melbour...	Hobart	71	7001	2008-07-02 00:00:00.000	2.	Victor Gom...
11609	3445 Fine Drive	AU, Victoria, Bendigo	Oranbourne	77	3977	2008-05-29 00:00:00.000	2.	Craig Sanz
11617	5844 Miguel Drive	AU, Victoria, South Melbour...	Hobart	71	7001	2007-11-05 00:00:00.000	2.	Victor Gom...
11618	2489 Teakwood Drive	AU, Victoria, Bendigo	Sunbury	77	3429	2007-01-23 00:00:00.000	2.	Craig Sanz
11635	2775 Robinson Ave.	AU, Victoria, South Melbour...	Sunbury	77	3429	2005-12-19 00:00:00.000	2.	Victor Gom...
11656	406 Pacific Avenue	AU, Victoria, Bendigo	Seaford	77	3198	2006-12-27 00:00:00.000	2.	Craig Sanz
11696	3608 Sinclair Avenue	AU, Victoria, South Melbour...	Warrnambool	77	3280	2007-11-01 00:00:00.000	2.	Victor Gom...
11699	4594 Rose Dr.	AU, Victoria, Bendigo	Geelong	77	3220	2006-05-25 00:00:00.000	2.	Craig Sanz

Query executed successfully.

LT-BY-AKOSYUK (14.0 RTM) AM\akosyuk (51) ALEXEY_KOSYUK 00:00:00 1,000 rows

- d

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'LT-BY-AKOSYUK'. The main query window contains a T-SQL script that sets a variable, joins tables to find a specific address, and then deletes it. The Messages pane at the bottom indicates that 6 rows were affected and the query executed successfully.

```
52 SET
53     [AddressLine2] = [VAR].[AddressLine2],
54     [PersonName] = [PER].[FirstName] + ' ' + [PER].[LastName]
55 FROM @addressVariable AS [VAR]
56 INNER JOIN [AdventureWorks2012].[Person].[BusinessEntityAddress] AS [BEA]
57 ON [BEA].[AddressID] = [VAR].[AddressID]
58 INNER JOIN [AdventureWorks2012].[Person].[Person] AS [PER]
59 ON [PER].[BusinessEntityID] = [BEA].[BusinessEntityID];
60
61 -- d
62 DELETE [ADR]
63 FROM [dbo].[Address] AS [ADR]
64 INNER JOIN [AdventureWorks2012].[Person].[BusinessEntityAddress] AS [BEA]
65 ON [BEA].[AddressID] = [ADR].[AddressID]
66 INNER JOIN [AdventureWorks2012].[Person].[AddressType] AS [AT]
67 ON [AT].[AddressTypeID] = [BEA].[AddressTypeID] AND [AT].[Name] = 'Main Office';
68
69
70
```

100 %
Messages
(6 rows affected)
Completion time: 2019-10-20T03:44:33.0698298+03:00
100 %
Query executed successfully. LT-BY-AKOSYUK (14.0 RTM) AM\akosyuk (59) ALEXEY_KOSYUK 00:00:00 0 rows

- e

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left displays the database structure for 'LT-BY-AKOSYUK'. The main query window contains a T-SQL script that drops a column and then drops a constraint from the 'Address' table. The Results pane at the bottom shows the list of constraints that were dropped.

```
69 -- e
70 ALTER TABLE [dbo].[Address]
71 DROP COLUMN [PersonName];
72
73 --SELECT [INF].[CONSTRAINT_NAME] FROM [ALEXEY_KOSYUK].[INFORMATION_SCHEMA.CONSTRAINT_TABLE_USAGE] AS [INF]
74 --WHERE TABLE_SCHEMA = 'dbo' AND TABLE_NAME = 'Address';
75
76 --SELECT [CON].[name]
77 FROM sys.default_constraints AS [CON]
78 INNER JOIN sys.objects AS [OB]
79 ON [CON].[parent_object_id] = [OB].[object_id] AND schema_name([OB].[schema_id]) + '.' + [OB].[name] = 'dbo.Address'
80 ORDER BY [CON].[name];
81
82 ALTER TABLE [dbo].[Address]
83 DROP CONSTRAINT
84 [UQ_Address__3214EC2620FEED60],
85 [CH_Address_StateProvinceID],
86 [DF_Address_AddressLine2];
87
```

100 %
Results Messages
CONSTRAINT_NAME
1 PK_Address__091C2A1B21A83EDF
2 UQ_Address__3214EC2620FEED60
3 CH_Address_StateProvinceID
name
1 DF_Address_AddressLine2
Query executed successfully. LT-BY-AKOSYUK (14.0 RTM) AM\akosyuk (59) ALEXEY_KOSYUK 00:00:00 4 rows

Microsoft SQL Server Management Studio (SSMS) interface showing a query execution in the V8_1.sql - LT-BY-AKOSYUK.ALEXEY_KOSYUK (AM\akosyuk (59)) database.

Object Explorer: The left pane shows the database structure. The **Columns** folder under **dbo.Address** is highlighted with a red box, showing the following 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)

Query Window: The main pane displays a SQL script with the following commands:

```
-- e
69 ALTER TABLE [dbo].[Address]
70 DROP COLUMN [PersonName];
71
72
73 SELECT [INF].[CONSTRAINT_NAME] FROM [ALEXEY_KOSYUK].INFORMATION_SCHEMA.CONSTRAINT_TABLE_USAGE AS [INF]
74 WHERE TABLE_SCHEMA = 'dbo' AND TABLE_NAME = 'Address';
75
76 SELECT [CON].[name]
77 FROM sys.default_constraints AS [CON]
78 INNER JOIN sys.objects AS [OB]
79 ON [CON].[parent_object_id] = [OB].[object_id] AND schema_name([OB].[schema_id]) + '.' + [OB].[name] = 'dbo.Address'
80 ORDER BY [CON].[name];
81
82 ALTER TABLE [dbo].[Address]
83 DROP CONSTRAINT
84 [UQ_Address_3214EC2620FEED60],
85 [CH_Address_StateProvinceID],
86 [DF_Address_AddressLine2];
87
```

Messages: The bottom pane shows the execution results:

```
100 %
Messages
Commands completed successfully.
Completion time: 2019-10-20T04:26:36.8966471+03:00
```

Status Bar: The bottom status bar indicates "Query executed successfully." and "LT-BY-AKOSYUK (14.0 RTM) | AM\akosyuk (59) | ALEXEY_KOSYUK | 00:00:00 | 0 rows".

- f

Microsoft SQL Server Management Studio (SSMS) interface showing a query execution in the V8_1.sql - LT-BY-AKOSYUK.ALEXEY_KOSYUK (AM\akosyuk (59)) database.

Object Explorer: The left pane shows the database structure. The **Tables** folder under **dbo** is highlighted with a red box, showing the following tables:

- Address
- AddressLine1
- AddressLine2
- City
- StateProvinceID
- PostalCode
- ModifiedDate
- ID

Query Window: The main pane displays a SQL script with the following commands:

```
-- e
69 ALTER TABLE [dbo].[Address]
70 DROP COLUMN [PersonName];
71
72
73 SELECT [INF].[CONSTRAINT_NAME] FROM [ALEXEY_KOSYUK].INFORMATION_SCHEMA.CONSTRAINT_TABLE_USAGE AS [INF]
74 WHERE TABLE_SCHEMA = 'dbo' AND TABLE_NAME = 'Address';
75
76 SELECT [CON].[name]
77 FROM sys.default_constraints AS [CON]
78 INNER JOIN sys.objects AS [OB]
79 ON [CON].[parent_object_id] = [OB].[object_id] AND schema_name([OB].[schema_id]) + '.' + [OB].[name] = 'dbo.Address'
80 ORDER BY [CON].[name];
81
82 ALTER TABLE [dbo].[Address]
83 DROP CONSTRAINT
84 [UQ_Address_3214EC2620FEED60],
85 [CH_Address_StateProvinceID],
86 [DF_Address_AddressLine2];
87
-- f
88 DROP TABLE [dbo].[Address];
89
90
```

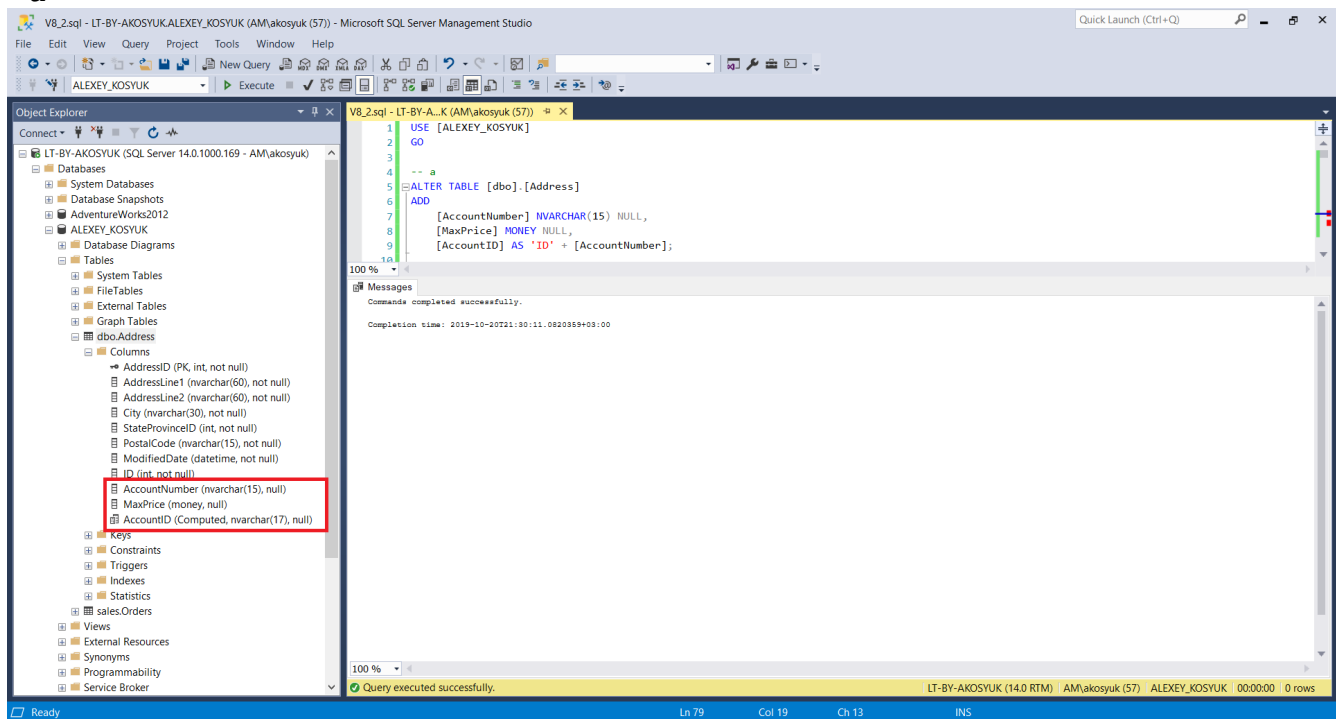
Messages: The bottom pane shows the execution results:

```
100 %
Messages
Commands completed successfully.
Completion time: 2019-10-20T04:28:39.7282324+03:00
```

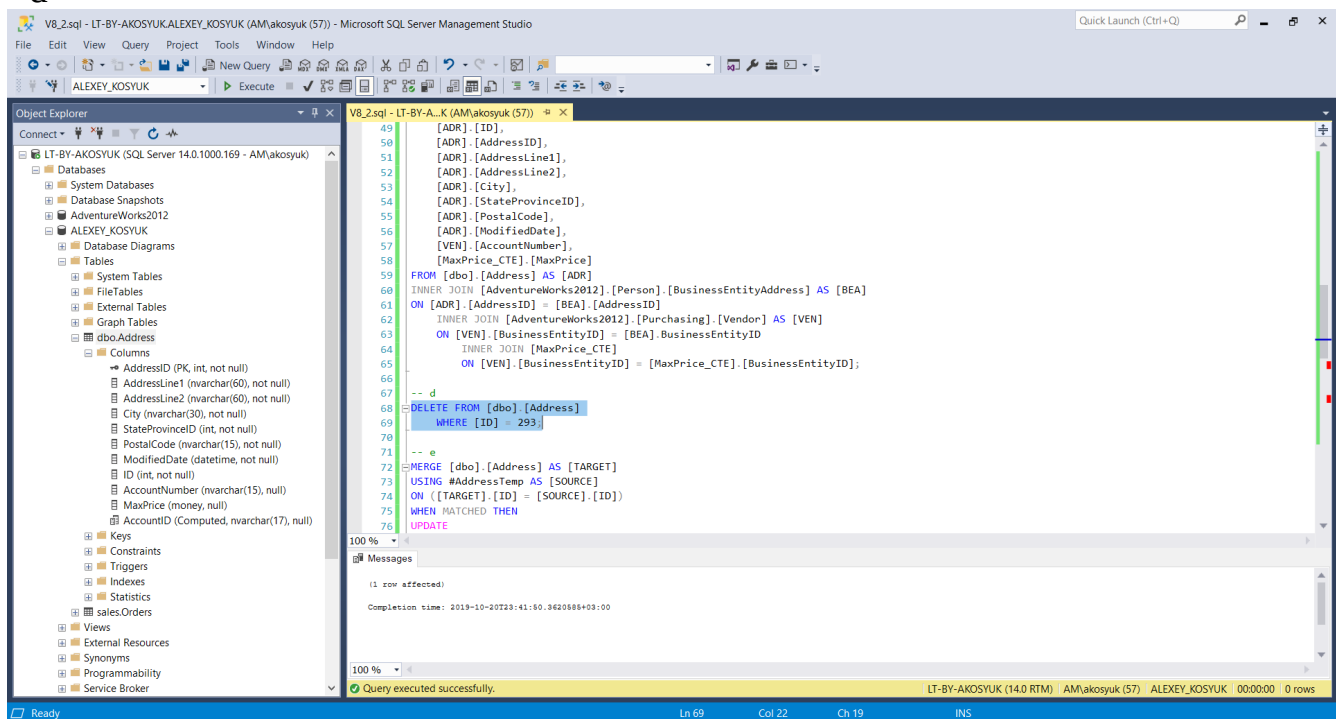
Status Bar: The bottom status bar indicates "Query executed successfully." and "LT-BY-AKOSYUK (14.0 RTM) | AM\akosyuk (59) | ALEXEY_KOSYUK | 00:00:00 | 0 rows".

2. Second subtask:

- a



- d



- C

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
 - Keys
 - Constraints
 - Triggers
 - Indexes
 - Statistics
 - sales.Orders
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - Security
 - Server Objects
 - Replication
 - PolyBase
 - Always On High Availability
 - Management
 - Integration Services Catalogs
 - SQL Server Agent
 - XEvent Profiler

Query Window (V8_2.sql - LT-BY-A...K (AM\akosyuk (57))):

```
40  (AddressLine1),
41  [City],
42  [StateProvinceID],
43  [PostalCode],
44  [ModifiedDate],
45  [AccountNumber],
46  [MaxPrice]
47  )
48  SELECT
49  [ADR].[ID],
50  [ADR].[AddressID],
51  [ADR].[AddressLine1],
52  [ADR].[AddressLine2],
53  [ADR].[City],
54  [ADR].[StateProvinceID],
55  [ADR].[PostalCode],
56  [ADR].[ModifiedDate],
57  [VEN].[AccountNumber],
58  [MaxPrice_CTE].[MaxPrice]
59  FROM [dbo].[Address] AS [ADR]
60  INNER JOIN [AdventureWorks2012].[Person].[BusinessEntityAddress] AS [BEA]
61  ON [ADR].[AddressID] = [BEA].[AddressID]
62  INNER JOIN [AdventureWorks2012].[Purchasing].[Vendor] AS [VEN]
63  ON [VEN].[BusinessEntityID] = [BEA].[BusinessEntityID]
64  INNER JOIN [MaxPrice_CTE]
65  ON [VEN].[BusinessEntityID] = [MaxPrice_CTE].[BusinessEntityID];
66
67  -- d
68  DELETE FROM [dbo].[Address]
```

Messages:

(0 rows affected)

Completion time: 2019-10-20T23:46:27.6473901+03:00

100 %

Query executed successfully.

LT-BY-AKOSYUK (14.0 RTM) | AM\akosyuk (57) | ALEXEY_KOSYUK | 00:00:00 | 0 rows

Ready | Ln 65 | Col 73 | Ch 67 | INS