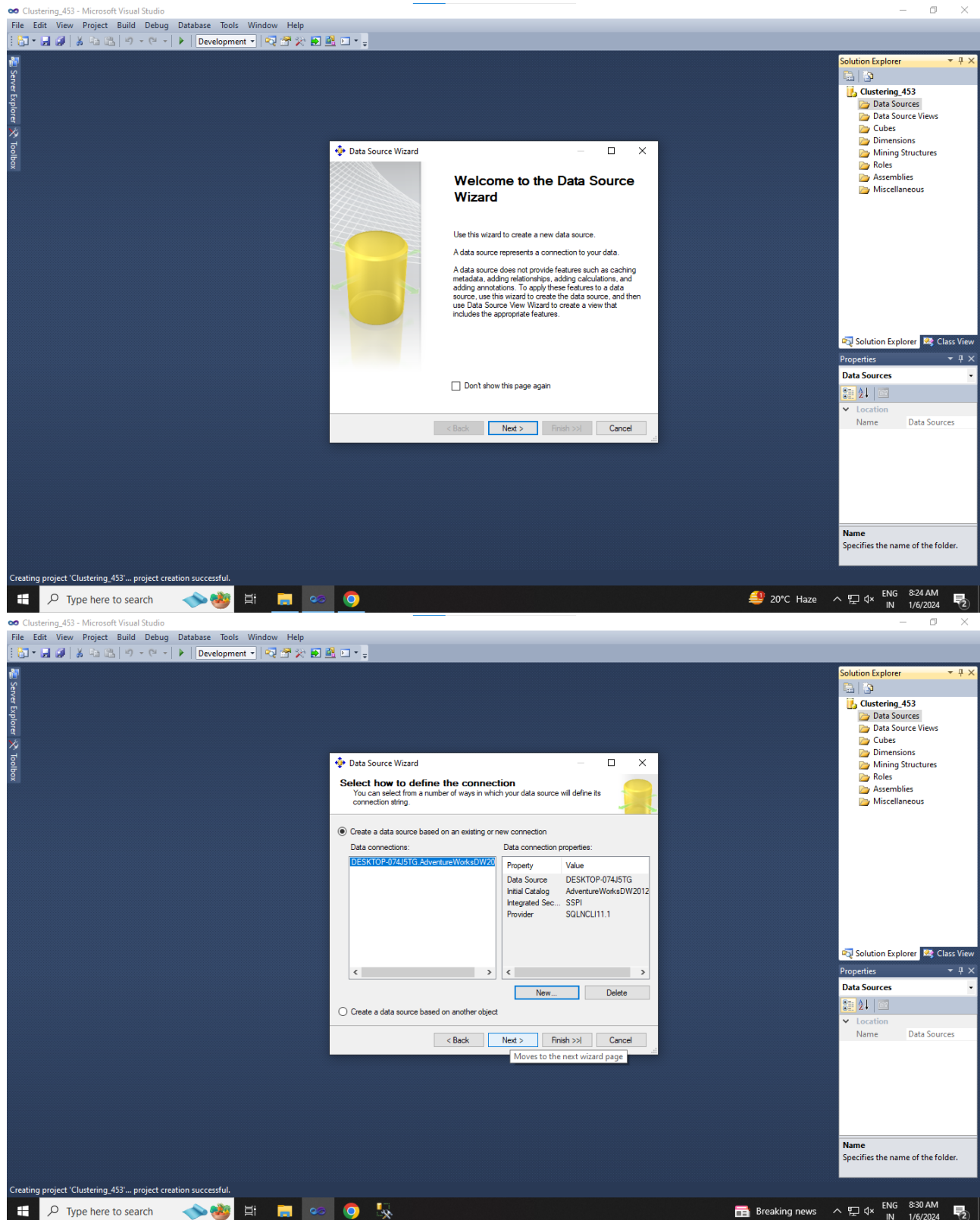
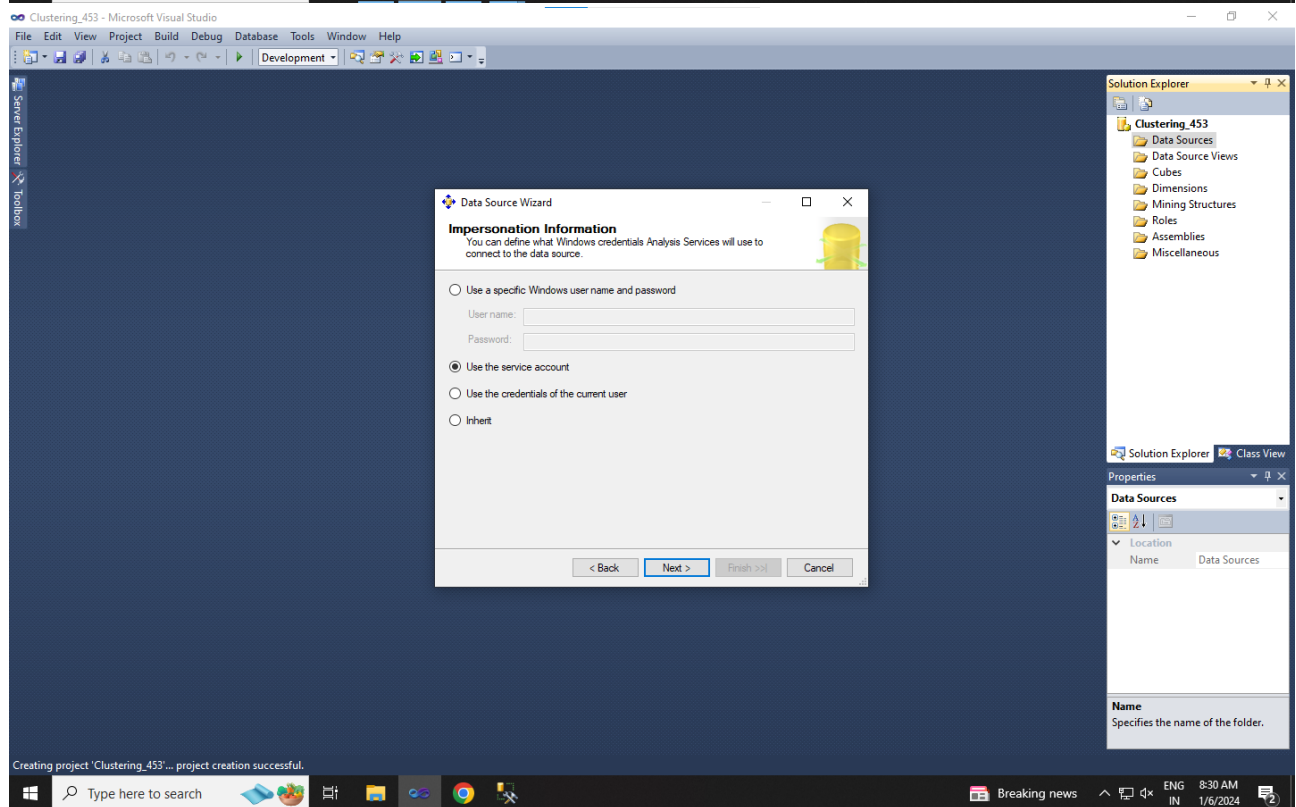
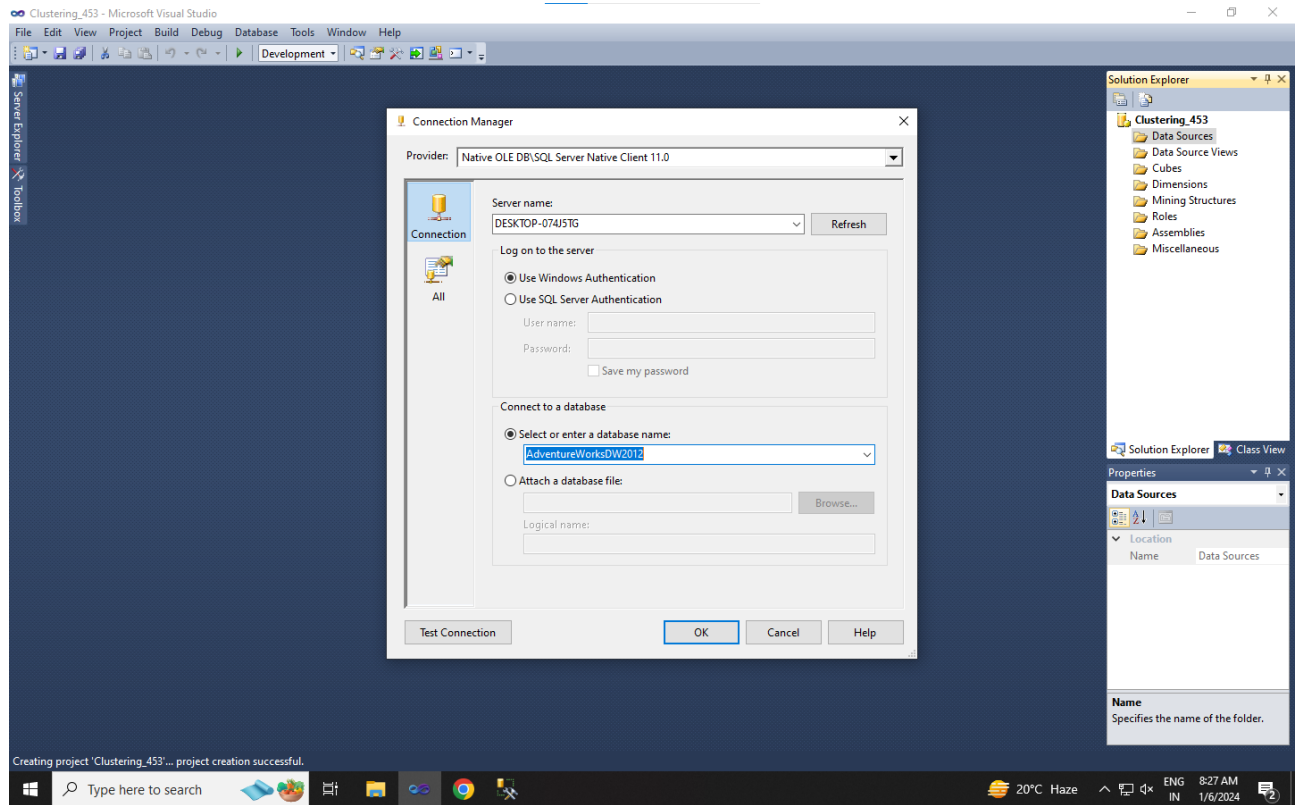


PRACTICAL 02: 07. PERFORM THE DATA CLUSTERING USING CLUSTERING ALGORITHM.

(06/01/2024)

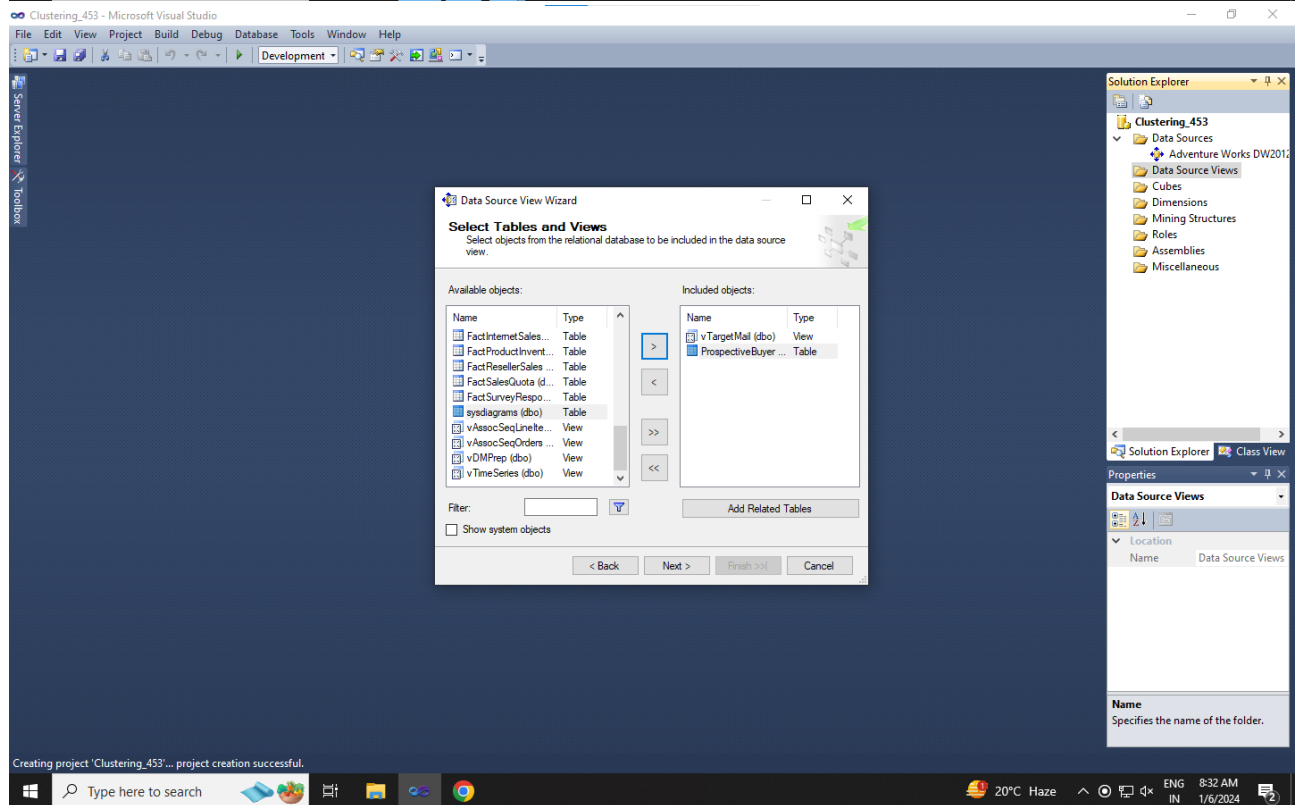
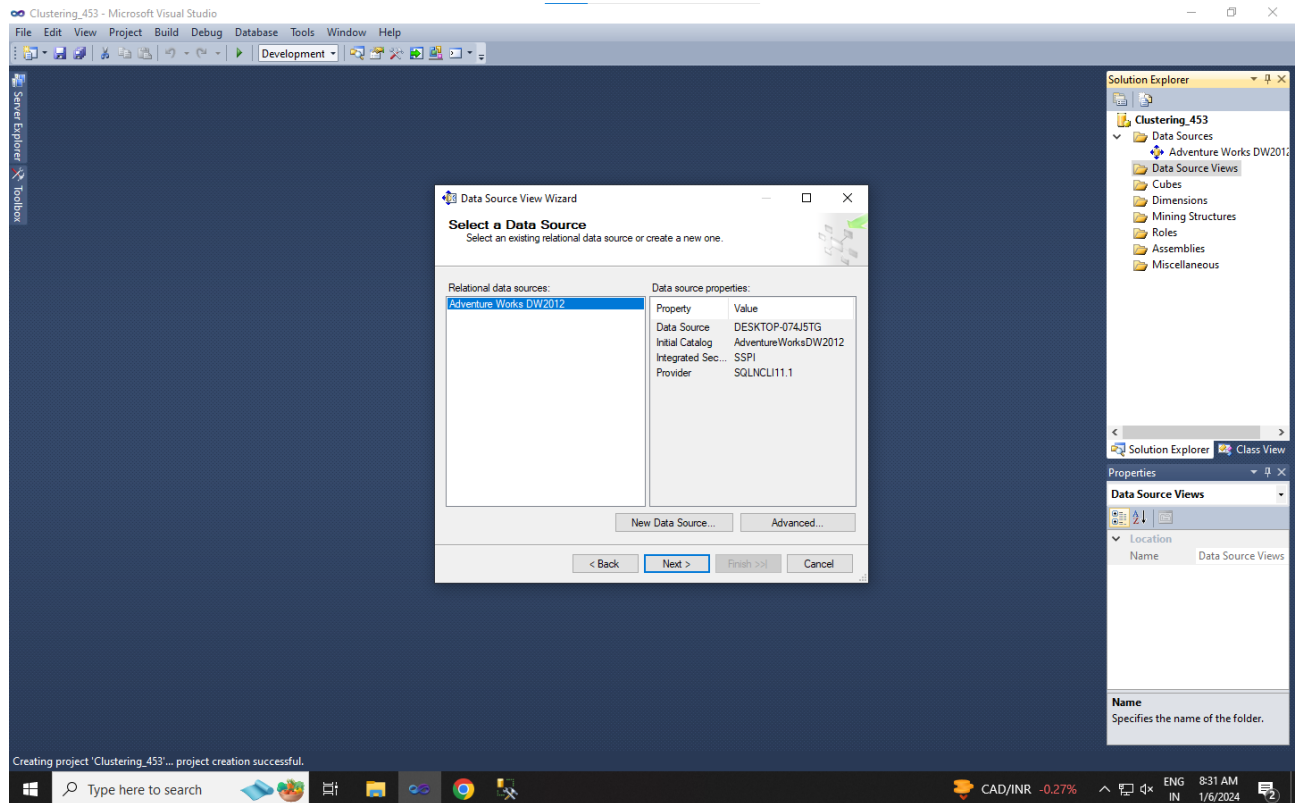




The image displays two screenshots of the Microsoft Visual Studio interface, specifically the 'Clustering_453' project. The top screenshot shows the 'Data Source Wizard' dialog box, which is titled 'Completing the Wizard'. It prompts the user to provide a name for the new data source. The 'Data source name' field is filled with 'Adventure Works DW2012'. Below this, a 'Preview' section shows the connection string: 'Provider=SQLNCLI11.1;Data Source=DESKTOP-074JSTG;Integrated Security=SSPI;Initial Catalog=AdventureWorksDW2012'. The 'Finish' button is highlighted. The bottom screenshot shows the 'Data Source View Wizard' dialog box, titled 'Welcome to the Data Source View Wizard'. It explains that the wizard is used to create a new data source view from tables and views in a relational database. It also mentions that a data source provides a simple connection to a relational database and lists advanced features like caching metadata, adding relationships, creating calculations, and setting logical keys. The 'Next >' button is highlighted. Both screenshots show the 'Solution Explorer' on the right side of the IDE, which lists the project structure: 'Clustering_453' containing 'Data Sources', 'Data Source Views', 'Cubes', 'Dimensions', 'Mining Structures', 'Roles', 'Assemblies', and 'Miscellaneous'. The 'Properties' window at the bottom right shows the 'Name' property for the selected folder, with the description 'Specifies the name of the folder.'

Creating project 'Clustering_453'... project creation successful.

Creating project 'Clustering_453'... project creation successful.



The image displays two screenshots of the Microsoft Visual Studio interface, specifically the 'Clustering_453' project.

Top Screenshot: Data Source View Wizard

- Window Title:** Data Source View Wizard
- Section:** Completing the Wizard
- Instruction:** Provide a name, and then click Finish to create the new data source view.
- Name Field:** Contains the text 'Adventure Works DW2012'.
- Preview:** A tree view showing the structure of the data source view:
 - Adventure Works DW2012
 - ProspectiveBuyer (dbo)
 - vTargetMail (dbo)
- Buttons:** < Back, Next >, Finish, Cancel.

Right Panel (Solution Explorer and Properties):

- Solution Explorer:** Shows the project structure with folders like Data Sources, Data Source Views, Cubes, Dimensions, Mining Structures, Roles, Assemblies, and Miscellaneous.
- Properties:** Shows the 'Data Source Views' section with a 'Location' property set to 'Name'.

Bottom Screenshot: Data Mining Wizard

- Window Title:** Data Mining Wizard
- Section:** Welcome to the Data Mining Wizard
- Image:** A graphic of a pickaxe.
- Text:**

Use this wizard to create a new mining structure and a new mining model. A mining structure is a data structure that represents discovered knowledge based on analysis of OLAP or relational data. A mining model can be used to make predictions, if supported by the data mining technique used to create the mining model.

Click Next to build a mining structure and a mining model, or Cancel to exit the wizard.
- Checkbox:** ☐ Don't show this page again
- Buttons:** < Back, Next >, Finish >>, Cancel.

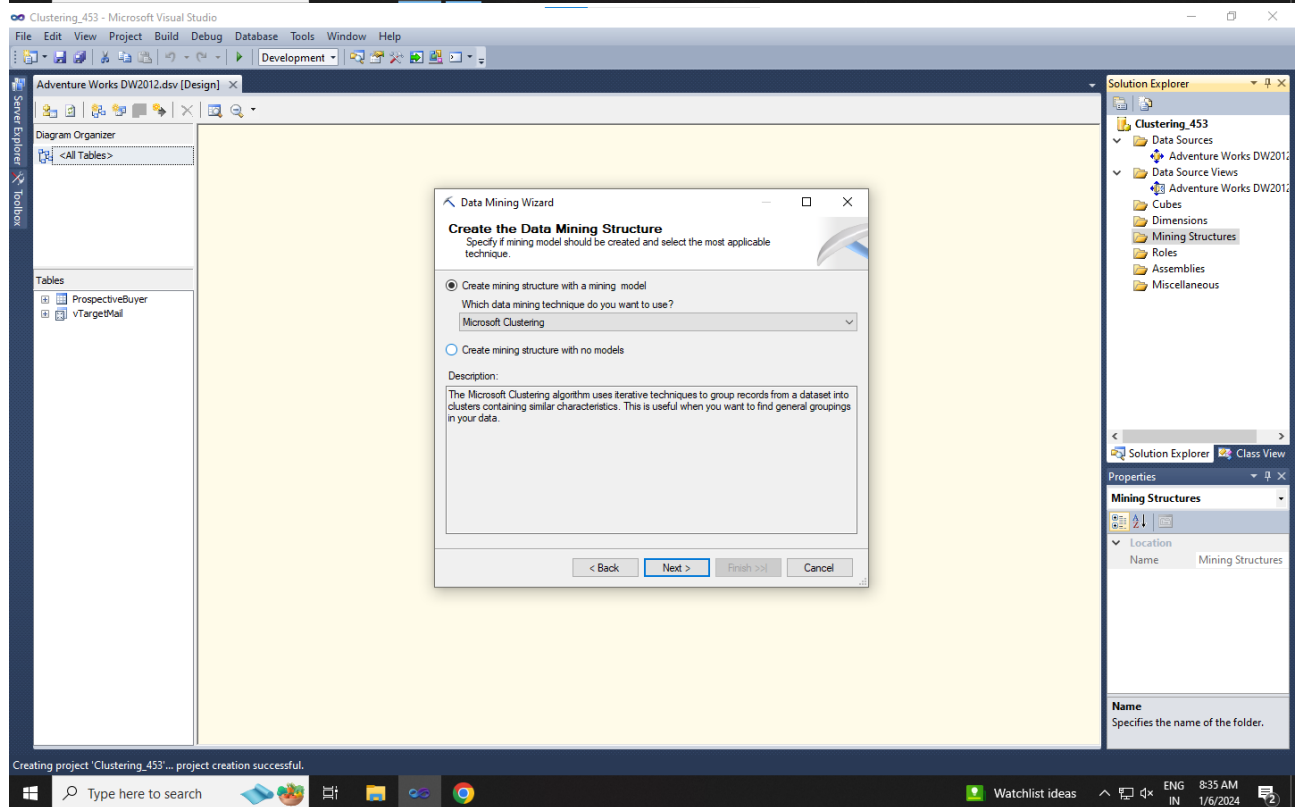
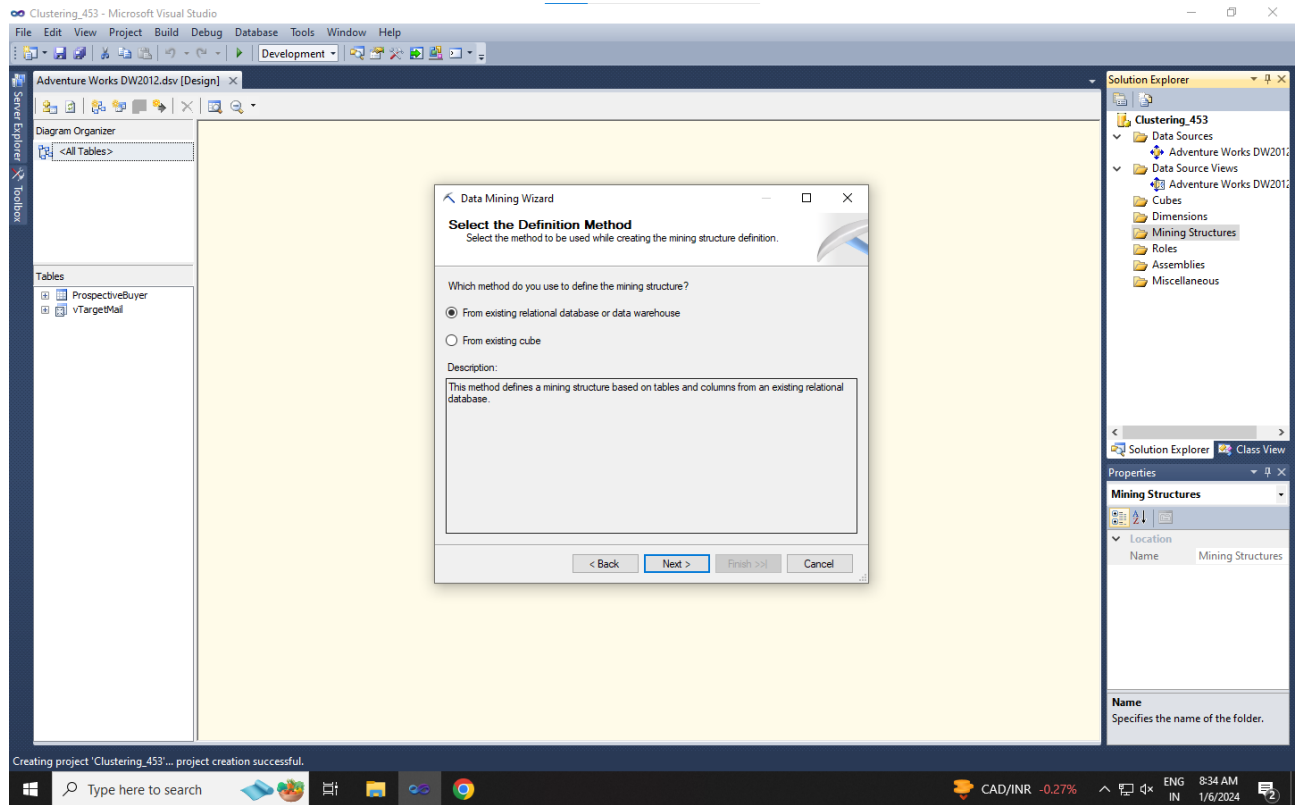
Left Panel (Diagram Organizer and Tables):

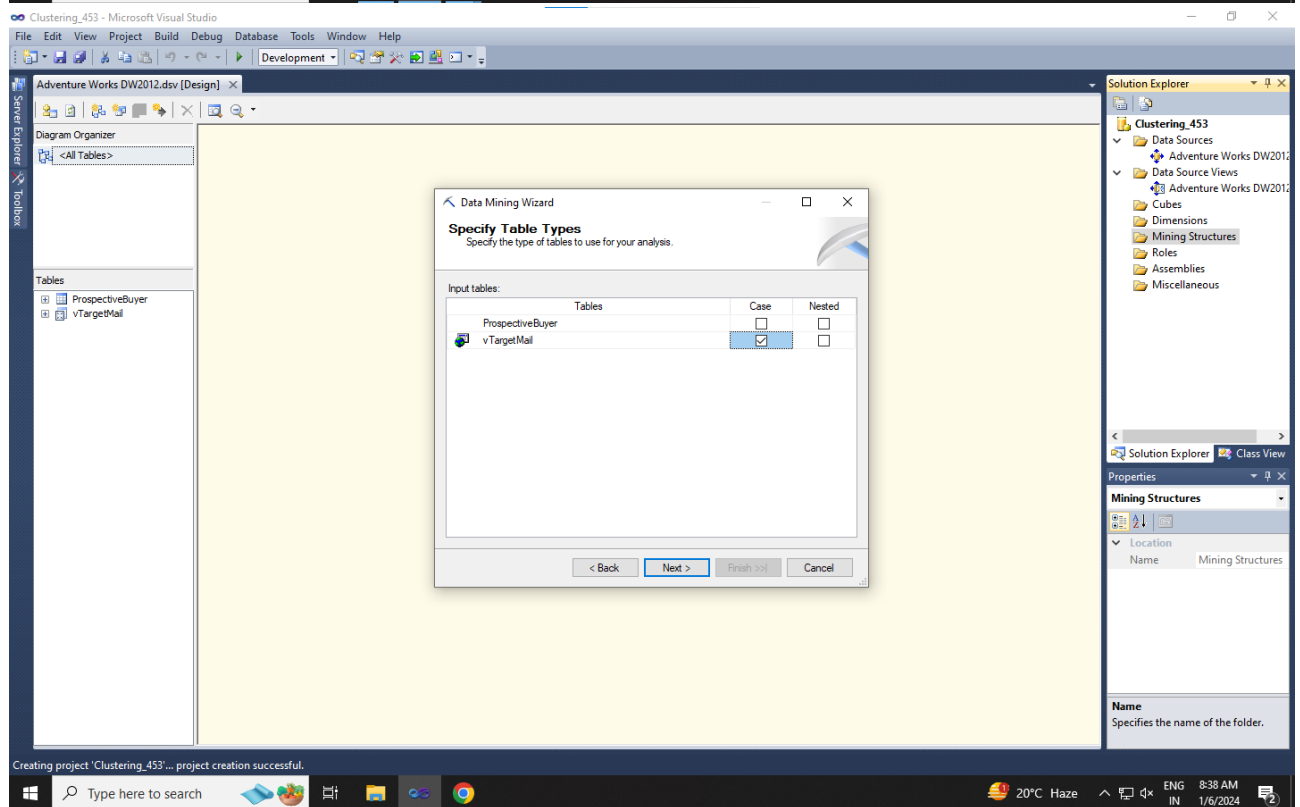
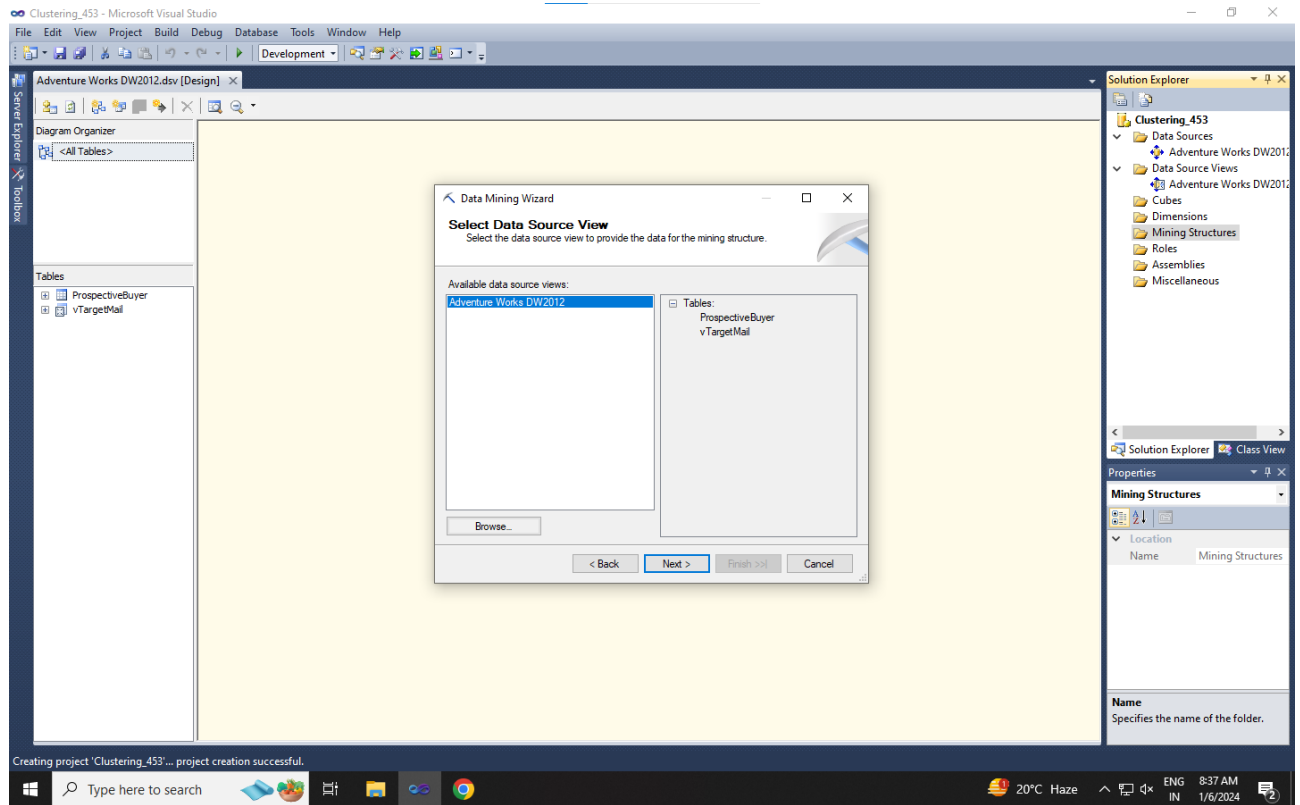
- Diagram Organizer:** Shows a tree view with 'All Tables'.
- Tables:** A list of tables including 'ProspectiveBuyer' and 'vTargetMail'.

Right Panel (Solution Explorer and Properties):

- Solution Explorer:** Shows the project structure with folders like Data Sources, Data Source Views, Adventure Works DW2012, Cubes, Dimensions, Mining Structures, Roles, Assemblies, and Miscellaneous.
- Properties:** Shows the 'Mining Structures' section with a 'Location' property set to 'Name'.

Status Bar: At the bottom, it indicates 'Creating project 'Clustering_453'... project creation successful.'





Clustering_453 - Microsoft Visual Studio

File Edit View Project Build Debug Database Tools Window Help

Adventure Works DW2012.dsv [Design]

Diagram Organizer

Tables

ProspectiveBuyer
vTargetMail

Data Mining Wizard

Specify Columns' Content and Data Type

Specify mining structure columns' content and data type.

Mining model structure:

Columns	Content Type	Data Type
Age	Continuous	Long
Bike Buyer	Discrete	Long
Customer Key	Key	Long
Email Address	Discrete	Text
Gender	Discrete	Text
Number Cars Owned	Discrete	Long
Number Children At Home	Discrete	Long
Phone	Discrete	Text
Region	Discrete	Text
Total Children	Discrete	Long
Yearly Income	Continuous	Double

Detect continuous or discrete for numeric columns:

Detect

< Back Next > Finish >> Cancel

Solution Explorer

Clustering_453

- Data Sources
 - Adventure Works DW2012
- Data Source Views
 - Adventure Works DW2012
- Cubes
- Dimensions
- Mining Structures
- Roles
- Assemblies
- Miscellaneous

Properties

Mining Structures

Location

Name Mining Structures

Name

Specifies the name of the folder.

Creating project 'Clustering_453'... project creation successful.

Type here to search

20°C Haze

ENG IN 8:44 AM 1/6/2024

Clustering_453 - Microsoft Visual Studio

File Edit View Project Build Debug Database Tools Window Help

Adventure Works DW2012.dsv [Design]

Diagram Organizer

Tables

ProspectiveBuyer
vTargetMail

Data Mining Wizard

Create Testing Set

Specify the number of cases to be reserved for model testing.

Percentage of data for testing: 30 %

Maximum number of cases in testing data set:

Description:

Input data will be randomly split into two sets, a training set and a testing set, based on the percentage of data for testing and maximum number of cases in testing data set you provide. The training set is used to create the mining model. The testing set is used to check model accuracy.

[Percentage of data for testing] specifies percentages of cases reserved for testing set.
[Maximum number of cases in testing data set] limits total number of cases in the testing set.
If both values are specified, both limits are enforced.

< Back Next > Finish >> Cancel

Solution Explorer

Clustering_453

- Data Sources
 - Adventure Works DW2012
- Data Source Views
 - Adventure Works DW2012
- Cubes
- Dimensions
- Mining Structures
- Roles
- Assemblies
- Miscellaneous

Properties

Mining Structures

Location

Name Mining Structures

Name

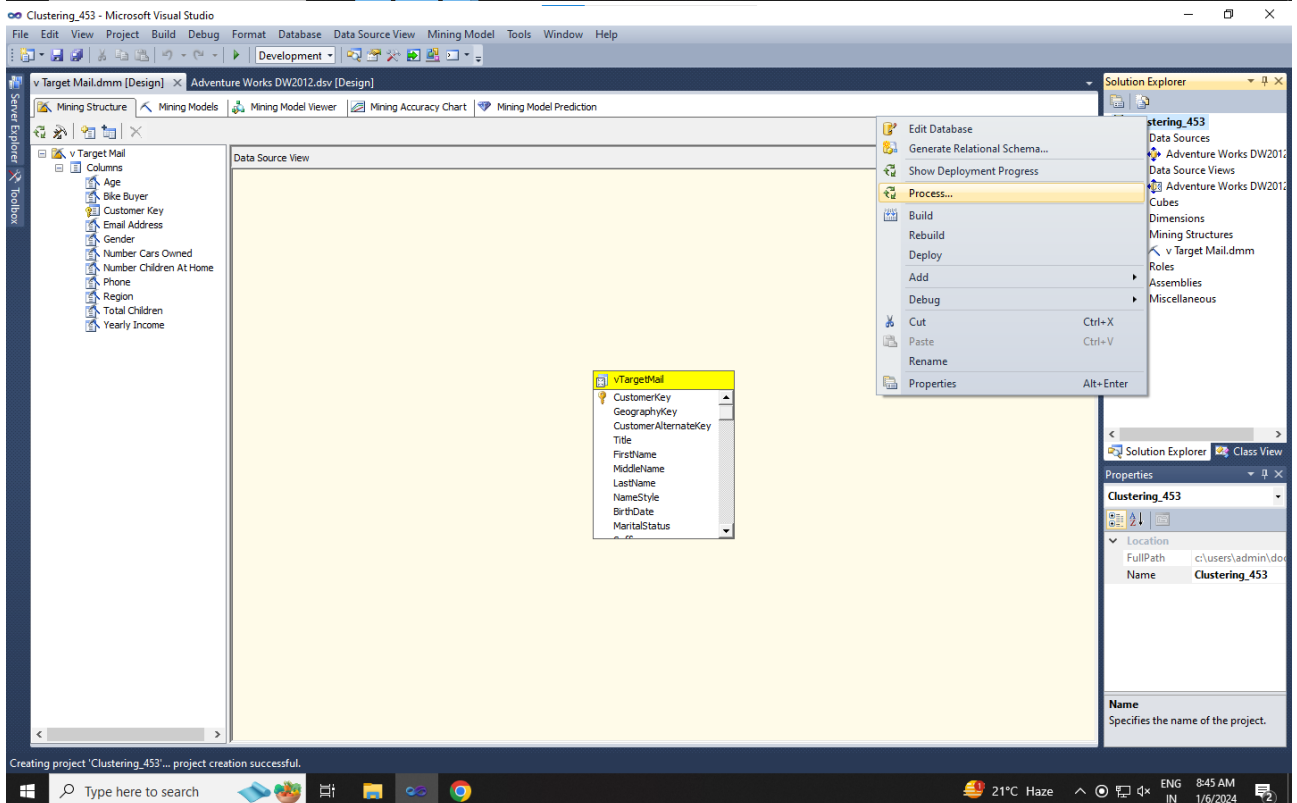
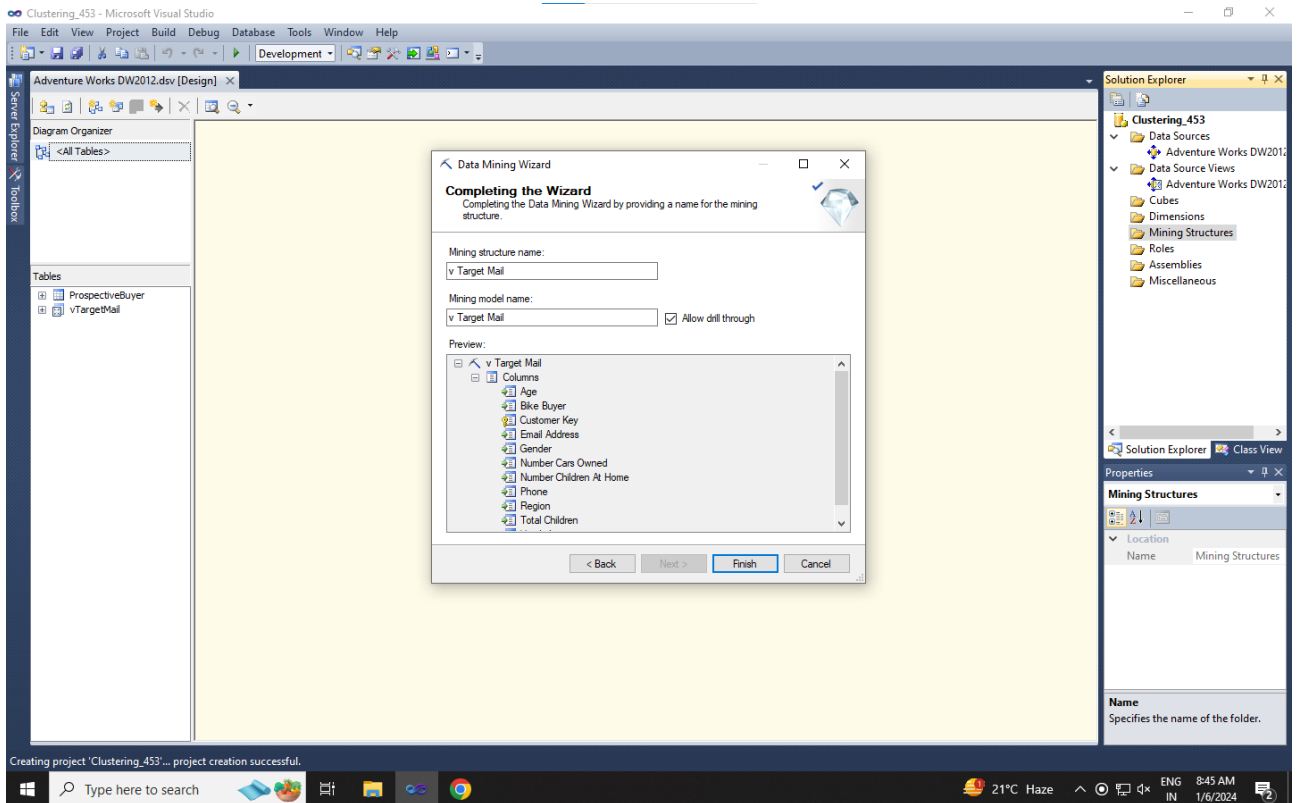
Specifies the name of the folder.

Creating project 'Clustering_453'... project creation successful.

Type here to search

20°C Haze

ENG IN 8:45 AM 1/6/2024



Clustering_453 - Microsoft Visual Studio

File Edit View Project Build Debug Database Tools Windows State

Process Database - Clustering_453

Object list:

Object Name	Type	Process Options	Settings
Clustering_453	Database	Process Full	

Remove Impact Analysis...

Batch Settings Summary

Processing order: Parallel

Transaction mode: (Default)

Dimension errors: (Default)

Dimension key error log path: (Default)

Process affected objects: Do not process

Change Settings...

Run... Close

Solution Explorer

Clustering_453

- Data Sources
- Adventure Works DW2012
- Data Source Views
- Adventure Works DW2012
- Cubes
- Dimensions
- Mining Structures
- v Target Mail.dmm
- Roles
- Assemblies
- Miscellaneous

Deployment Progress - Clu...

Server: localhost
Database: Clustering_453

Command

Status:

Deployment Completed Successfully

Deployment Pr... Properties

Creating project 'Clustering_453'... project creation successful.

Type here to search

21°C Haze

ENG 8:46 AM
IN 1/6/2024

Clustering_453 - Microsoft Visual Studio

File Edit View Project Build Debug Database Tools Windows State

Process Database - Clustering_453

Object list:

Object Name	Type	Process Options	Settings
Clustering_453	Database	Process Full	

Remove Impact Analysis...

Batch Settings Summary

Processing order: Parallel

Transaction mode: (Default)

Dimension errors: (Default)

Dimension key error log path: (Default)

Process affected objects: Do not process

Change Settings...

Run... Close

Solution Explorer

Clustering_453

- Data Sources
- Adventure Works DW2012
- Data Source Views
- Adventure Works DW2012
- Cubes
- Dimensions
- Mining Structures
- v Target Mail 1.dmm
- Roles
- Assemblies
- Miscellaneous

Deployment Progress - Clu...

Server: localhost
Database: Clustering_453

Command

Status:

Deployment Completed Successfully

Deployment Pr... Properties

Creating project 'Clustering_453'... project creation successful.

Type here to search

21°C Haze

ENG 8:49 AM
IN 1/6/2024

Process Progress

Command

- Processing Database 'Clustering_453' completed.
Start time: 1/6/2024 8:49:34 AM; End time: 1/6/2024 8:49:39 AM; Duration: 0:00:04
- Processing Mining Structure 'v Target Mail 1' completed.
Start time: 1/6/2024 8:49:34 AM; End time: 1/6/2024 8:49:39 AM; Duration: 0:00:04
- Processing Mining Model 'v Target Mail 1' completed.
Start time: 1/6/2024 8:49:35 AM; End time: 1/6/2024 8:49:36 AM; Duration: 0:00:00
- Processing Cube 'v Target Mail 1 -MC' completed.
Start time: 1/6/2024 8:49:35 AM; End time: 1/6/2024 8:49:36 AM; Duration: 0:00:00
- Processing Measure Group '~CaseDetail -MG' completed.
- Processing Dimension 'v Target Mail 1 -MC-Customer Key' completed.

Status:

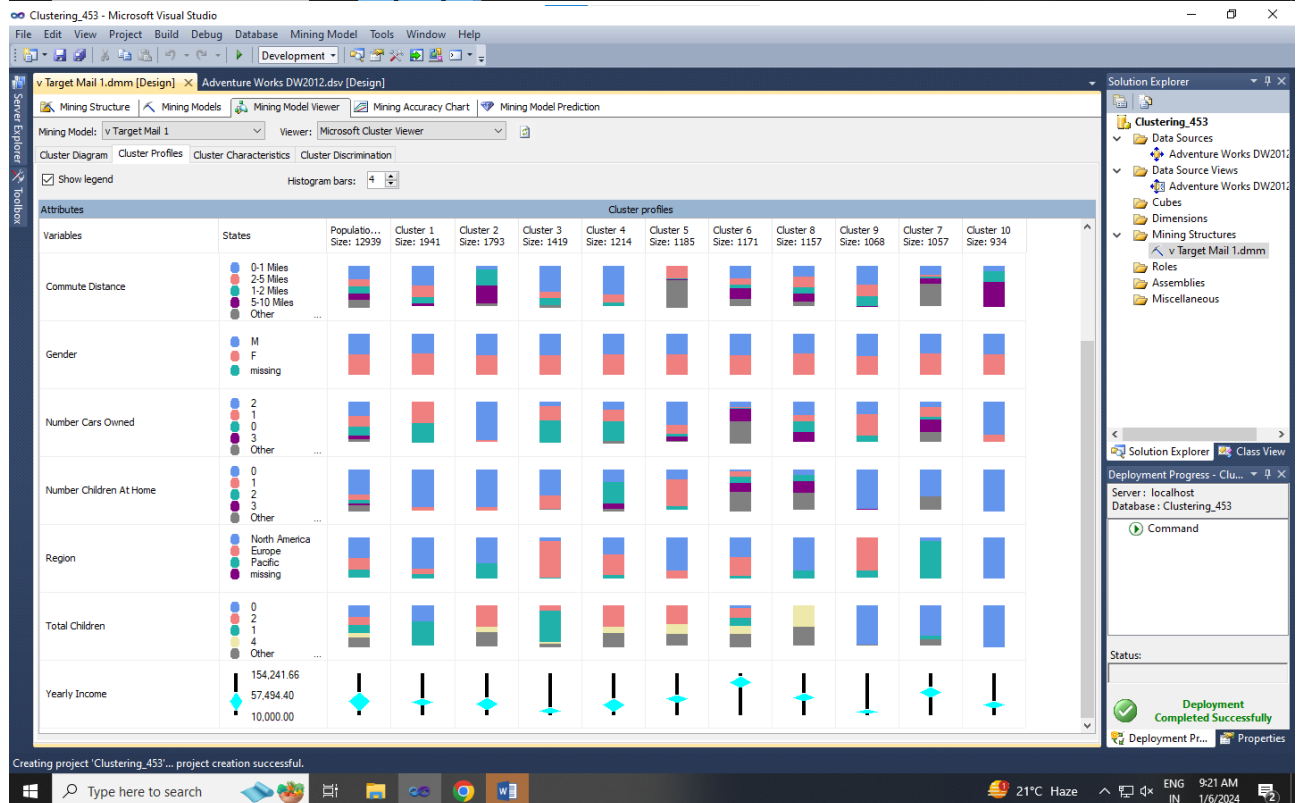
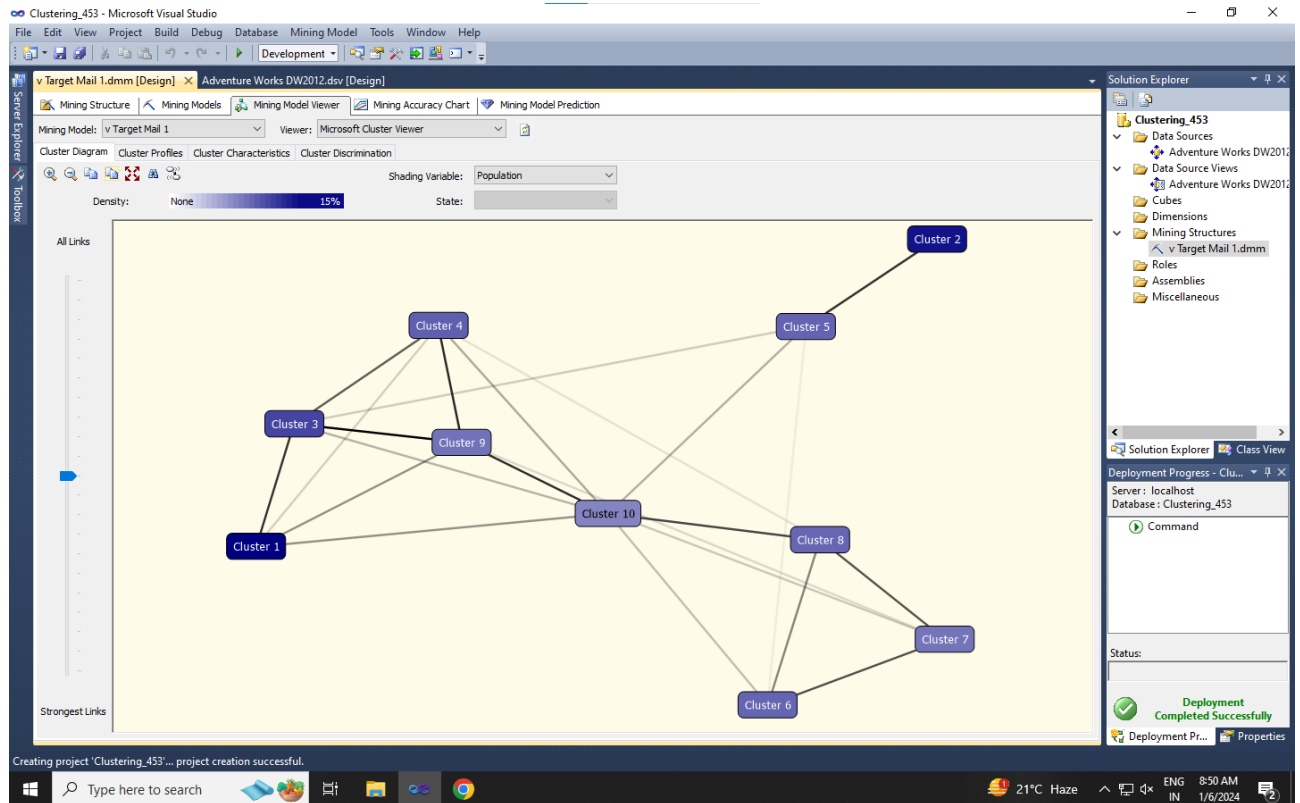
Process succeeded.

Stop Reprocess View Details... Copy

Close Help

Change Settings...

Run... Close



ZAHID SHAIKH 453

