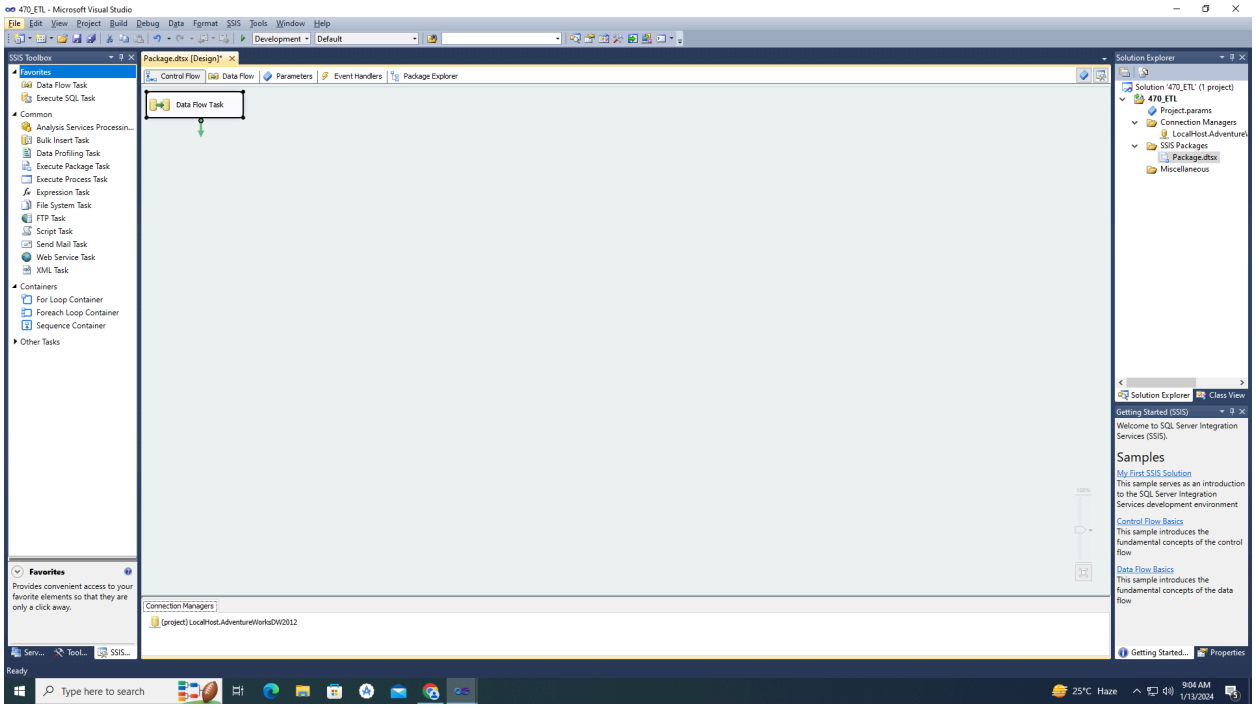
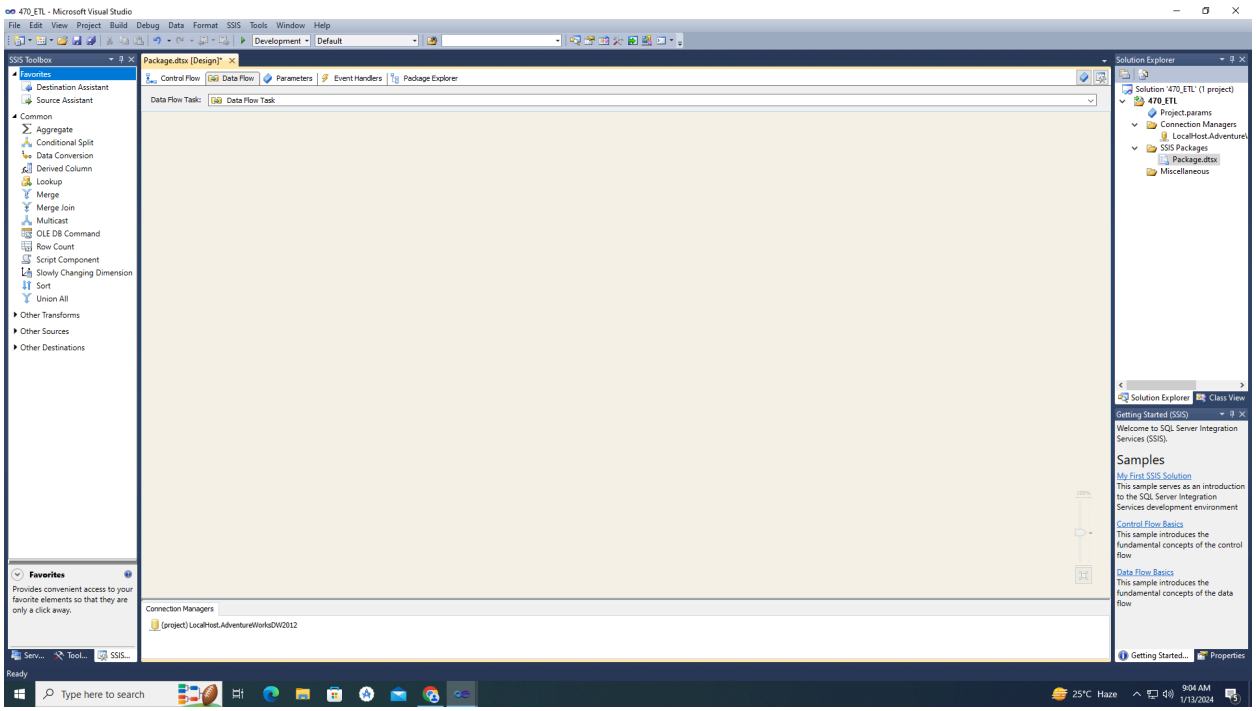
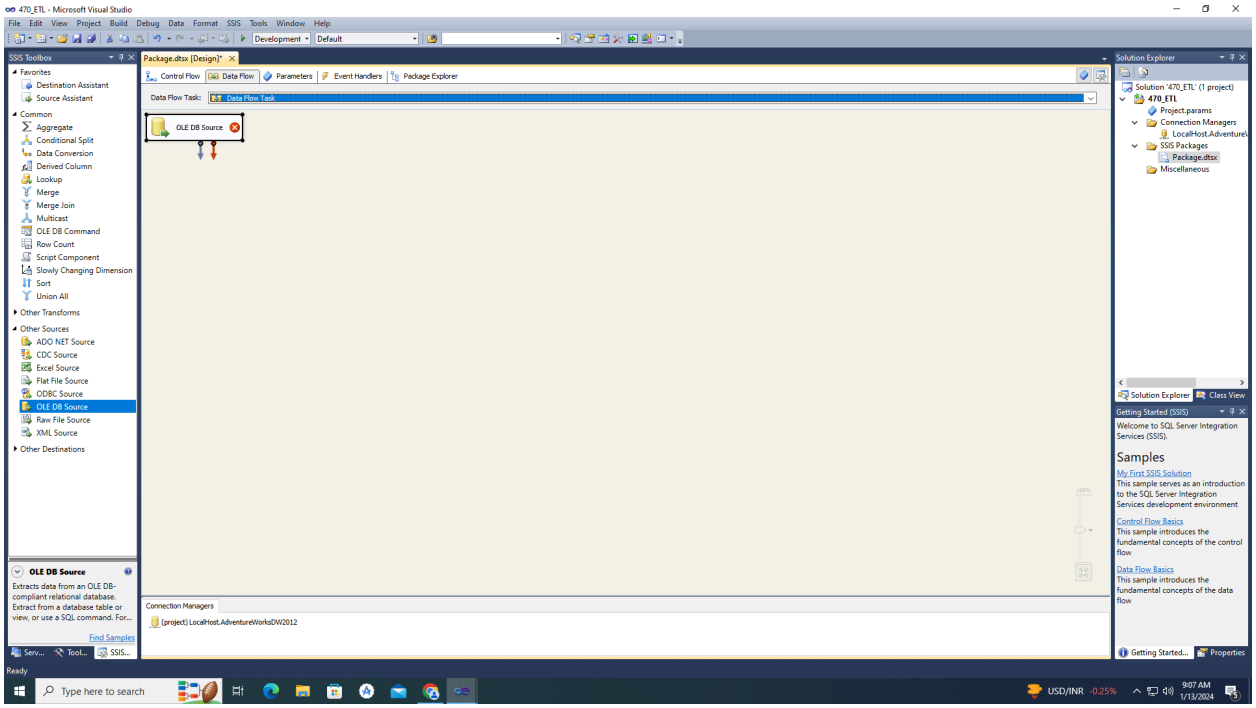
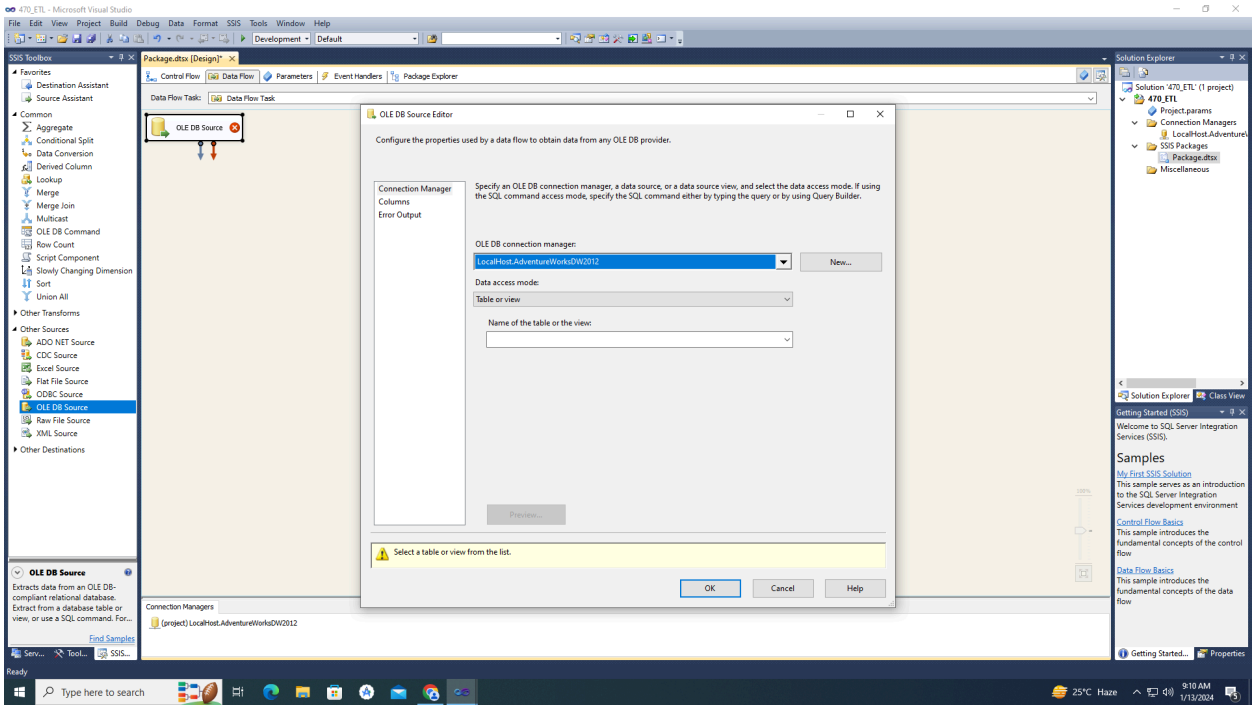
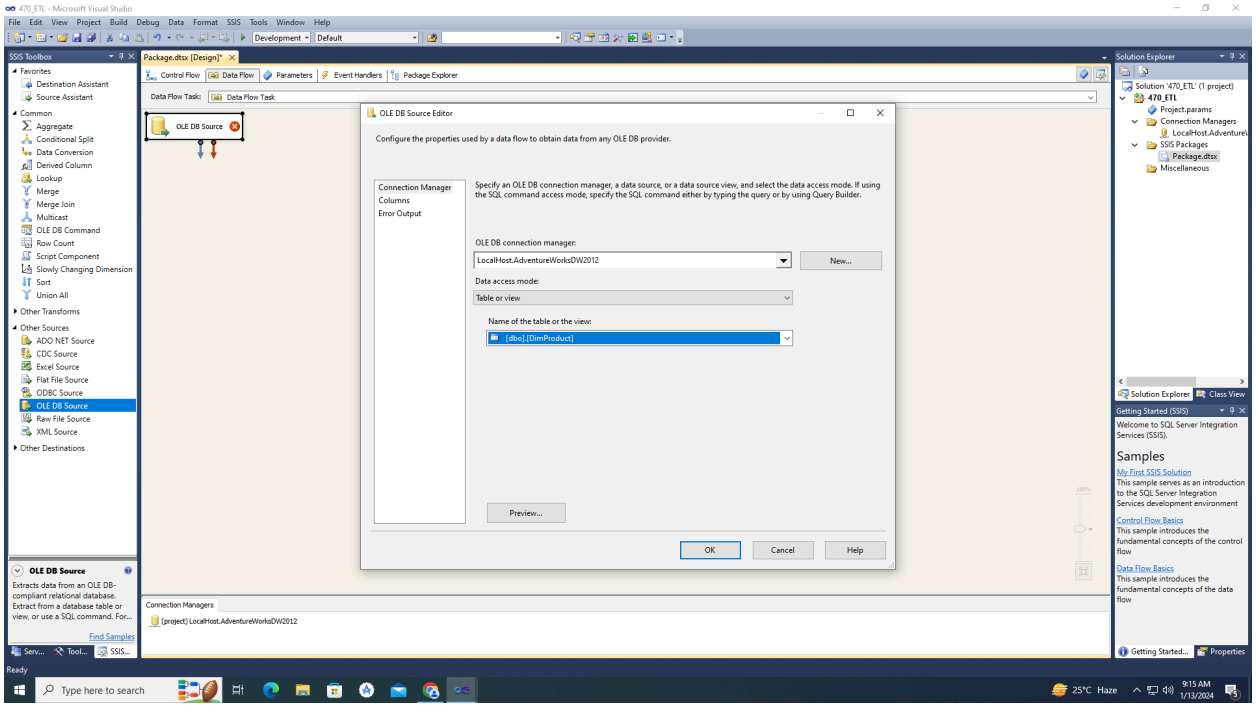
# practical 2b - 470

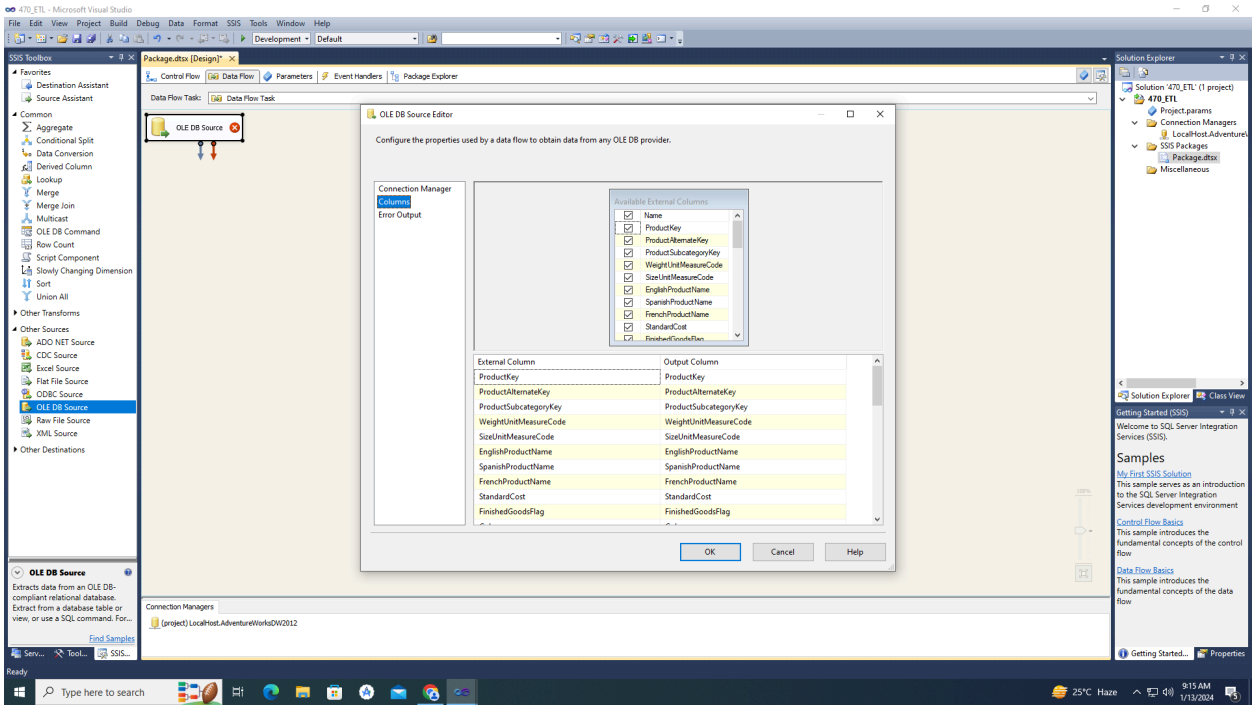


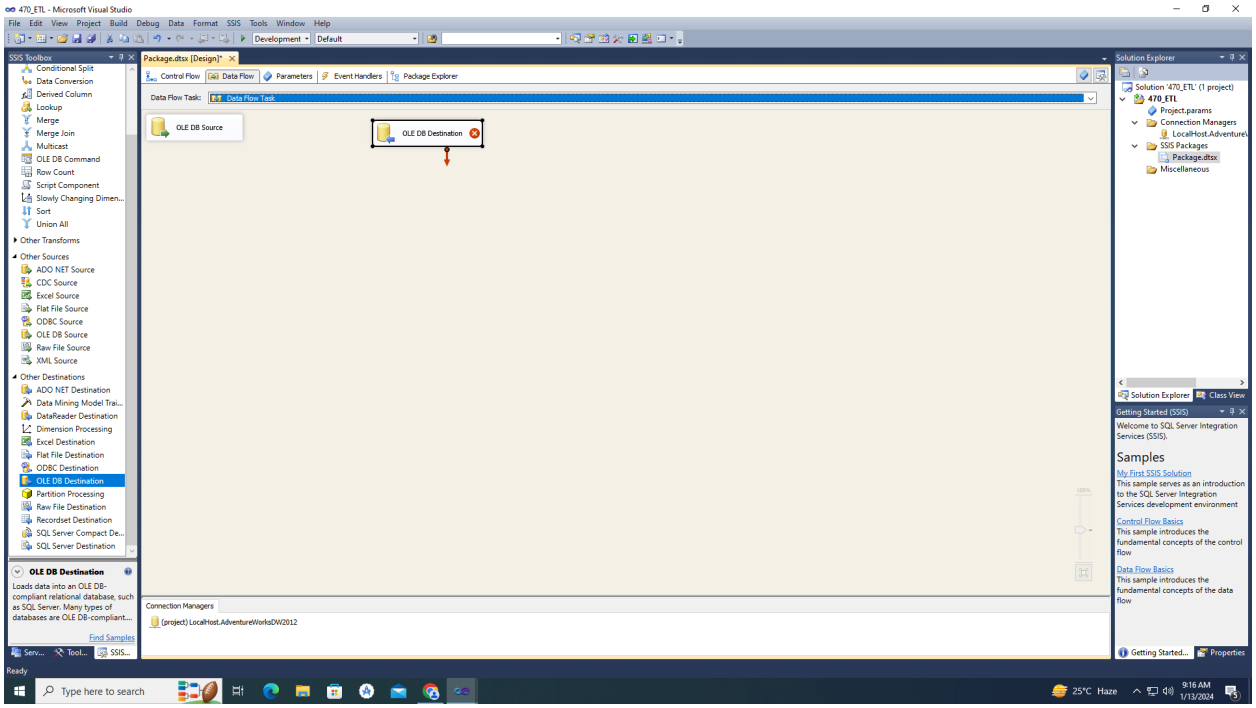



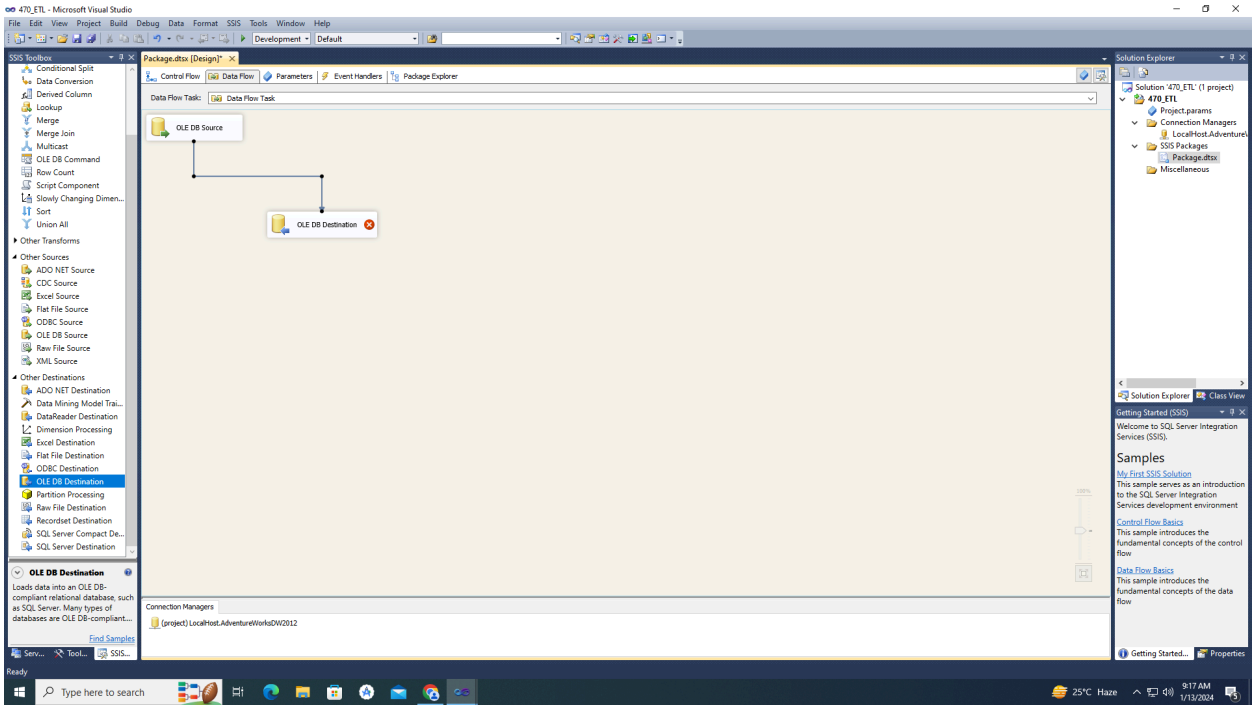

470_ETL - Microsoft Visual Studio
SSIS Toolbox
Package.dtsx [Design]*
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Data Flow Task:
OLE DB Source
Solution Explorer
Connection Managers
{project} LocalHost.AdventureWorksDW2012
Getting Started (SSIS)
Samples
Ready


470_ETL - Microsoft Visual Studio
SSIS Toolbox
Package.dtsx [Design]*
OLE DB Source Editor
Configure the properties used by a data flow to obtain data from any OLE DB provider.
Connection Manager
Columns
Error Output
Specify an OLE DB connection manager, a data source, or a data source view, and select the data access mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.
OLE DB connection manager:
LocalHost.AdventureWorksDW2012
New...
Data access mode:
Table or view
Name of the table or the view:
Preview...
Select a table or view from the list.
OK
Cancel
Help
Solution Explorer
Connection Managers
{project} LocalHost.AdventureWorksDW2012
Getting Started (SSIS)
Samples
Ready


470_ETL - Microsoft Visual Studio
OLE DB Source Editor
Configure the properties used by a data flow to obtain data from any OLE DB provider.
Connection Manager
Columns
Error Output
Specify an OLE DB connection manager, a data source, or a data source view, and select the data access mode. If using the SQL command access mode, specify the SQL command either by typing the query or by using Query Builder.
OLE DB connection manager:
LocalHost.AdventureWorksDW2012
New...
Data access mode:
Table or view
Name of the table or the view:
[dbo].[DimProduct]
Preview...
OK
Cancel
Help
OLE DB Source
Extracts data from an OLE DB-compliant relational database. Extract from a database table or view, or use a SQL command. For...
Find Samples
Connection Managers
(project) LocalHost.AdventureWorksDW2012
Ready


470_ETL - Microsoft Visual Studio
OLE DB Source Editor
Configure the properties used by a data flow to obtain data from any OLE DB provider.
Connection Manager
Columns
Error Output
Available External Columns
Name
ProductKey
ProductAlternateKey
ProductSubcategoryKey
WeightUnitMeasureCode
SizeUnitMeasureCode
EnglishProductName
SpanishProductName
FrenchProductName
StandardCost
External Column
Output Column
ProductKey
ProductAlternateKey
ProductSubcategoryKey
WeightUnitMeasureCode
SizeUnitMeasureCode
EnglishProductName
SpanishProductName
FrenchProductName
StandardCost
FinishedGoodsFlag
OK
Cancel
Help
OLE DB Source
Extracts data from an OLE DB-compliant relational database. Extract from a database table or view, or use a SQL command. For...
Find Samples
Connection Managers
(project) LocalHost.AdventureWorksDW2012
Ready


470_ETL - Microsoft Visual Studio
File Edit View Project Build Debug Data Format SSIS Tools Window Help
Development
Default
SSIS Toolbox
Package.dtsx [Design]*
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Data Flow Task:
Data Flow Task
OLE DB Source
OLE DB Destination
Connection Managers
(project) LocalHost.AdventureWorksDW2012
Solution Explorer
Solution '470_ETL' (1 project)
470_ETL
Project.params
Connection Managers
SSIS Packages
Package.dtsx
Miscellaneous
Getting Started (SSIS)
Welcome to SQL Server Integration Services (SSIS).
Samples
My First SSIS Solution
This sample serves as an introduction to the SQL Server Integration Services development environment
Control Flow Basics
This sample introduces the fundamental concepts of the control flow
Data Flow Basics
This sample introduces the fundamental concepts of the data flow
OLE DB Destination
Loads data into an OLE DB-compliant relational database, such as SQL Server. Many types of databases are OLE DB-compliant...
Find Samples
Ready
Type here to search
25°C Haze
9:16 AM
1/13/2024


470_ETL - Microsoft Visual Studio
File Edit View Project Build Debug Data Format SSIS Tools Window Help
Development
Default
SSIS Toolbox
Package.dtsx [Design]*
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Data Flow Task:
Data Flow Task
OLE DB Source
OLE DB Destination
Connection Managers
(project) LocalHost.AdventureWorksDW2012
Solution Explorer
Solution '470_ETL' (1 project)
470_ETL
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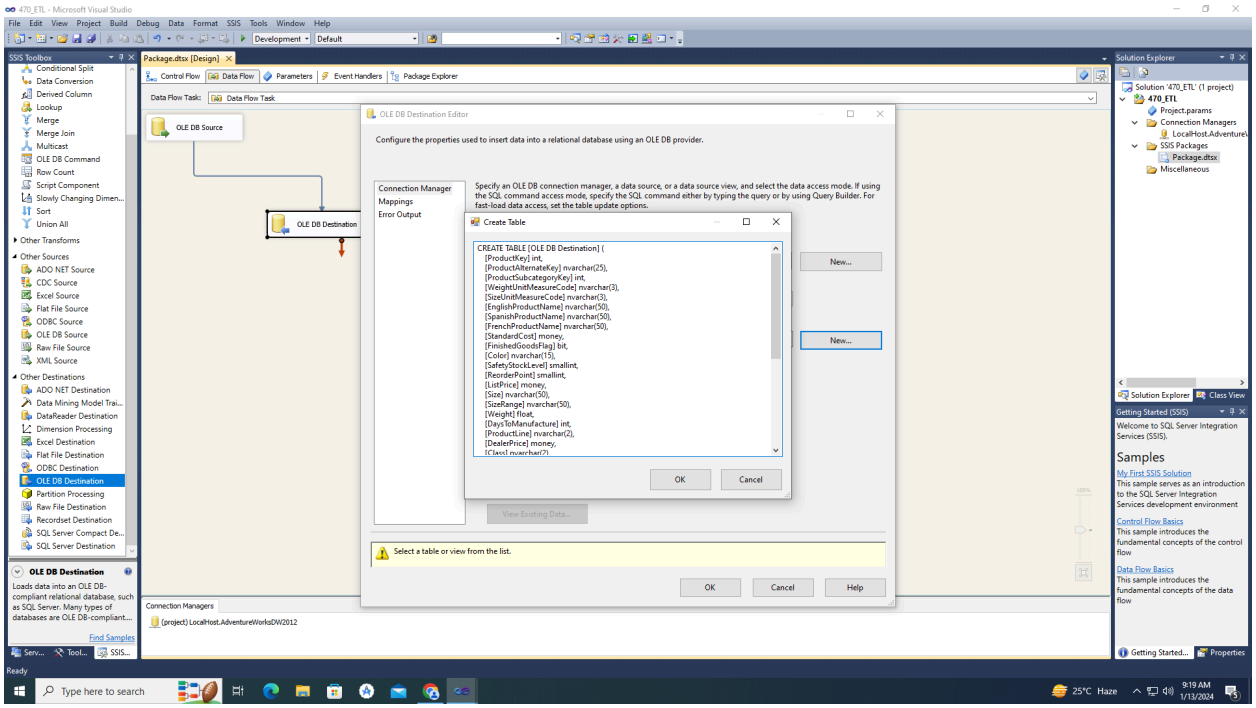
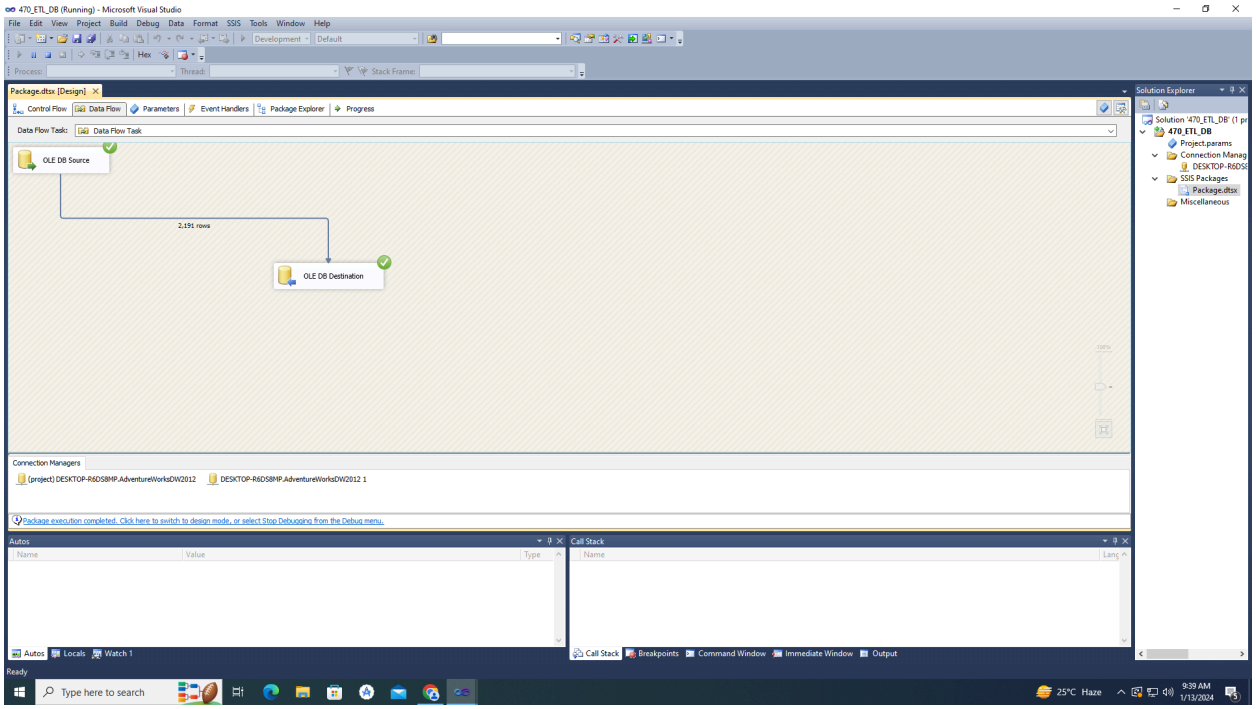
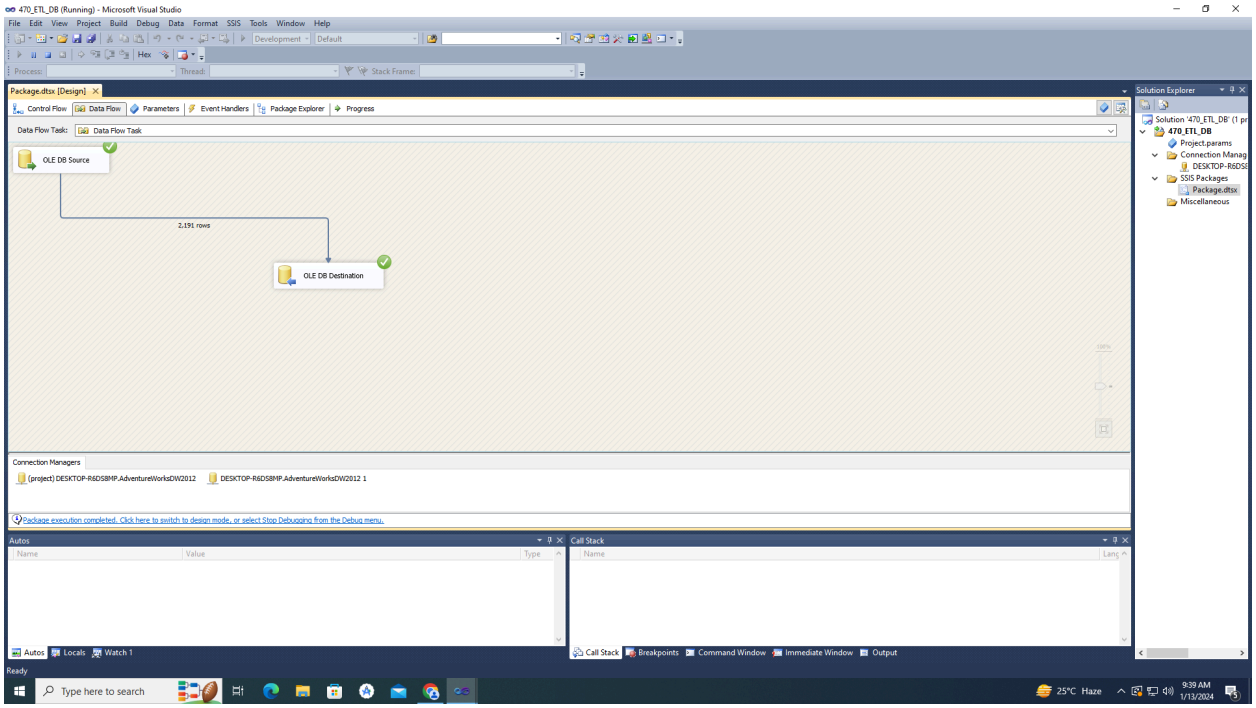
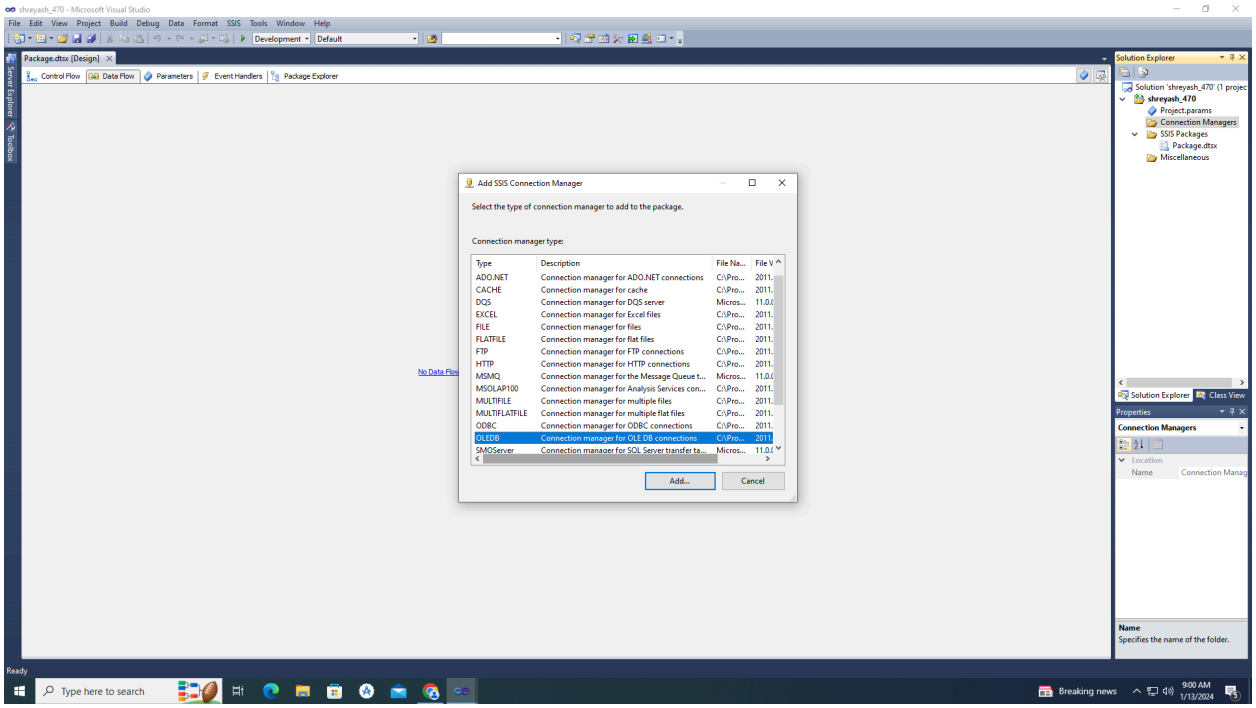
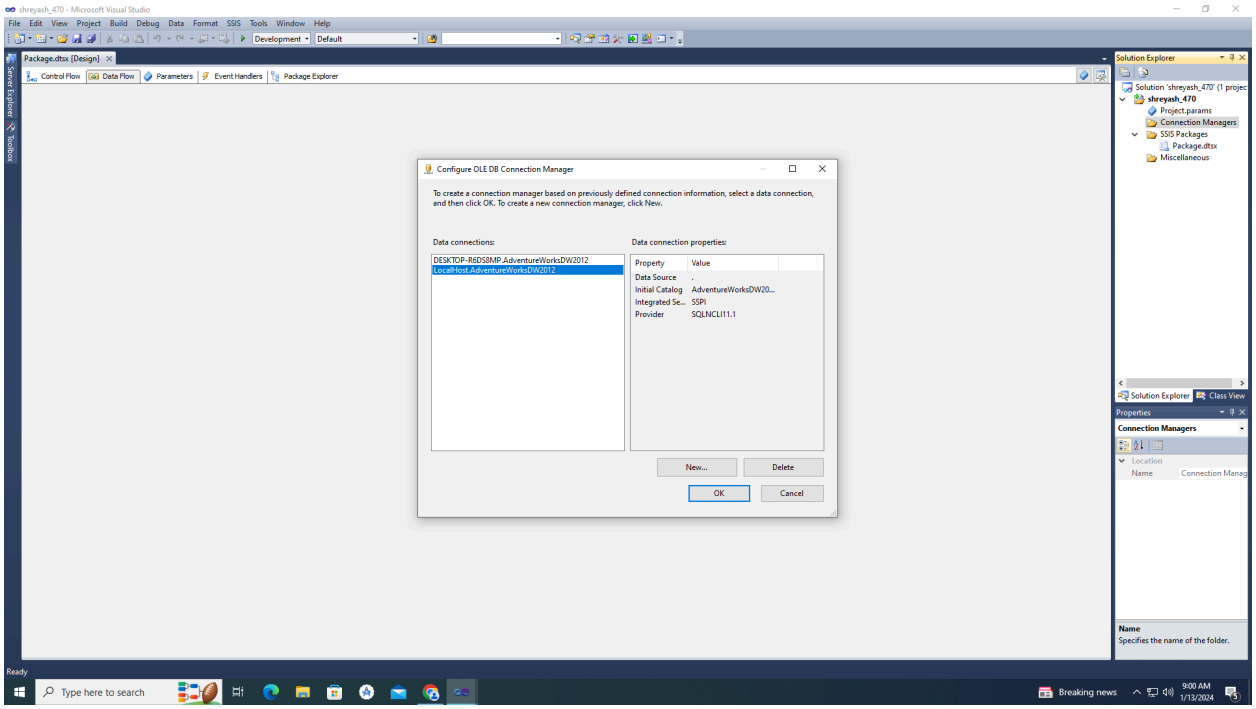
OLE DB Destination
Loads data into an OLE DB-compliant relational database, such as SQL Server. Many types of databases are OLE DB-compliant...
Find Samples
Ready
Type here to search
25°C Haze
9:17 AM
1/13/2024


470_ETL - Microsoft Visual Studio
Package.dtsx [Design]
OLE DB Source
OLE DB Destination
OLE DB Destination Editor
Configure the properties used to insert data into a relational database using an OLE DB provider.
Connection Manager
Mappings
Error Output
Create Table
CREATE TABLE [OLE DB Destination] (
[ProductKey] int,
[ProductAlternateKey] nvarchar(25),
[ProductSubcategoryKey] int,
[WeightUnitMeasureCode] nvarchar(3),
[SizeUnitMeasureCode] nvarchar(3),
[EnglishProductName] nvarchar(50),
[SpanishProductName] nvarchar(50),
[FrenchProductName] nvarchar(50),
[StandardCost] money,
[FinishedGoodsFlag] bit,
[Color] nvarchar(15),
[SafetyStockLevel] smallint,
[ReorderPoint] smallint,
[ListPrice] money,
[Size] nvarchar(50),
[SizeRange] nvarchar(50),
[Weight] float,
[DaysToManufacture] int,
[ProductLine] nvarchar(2),
[DealerPrice] money,
[Class] nvarchar(2)
OK
Cancel
New...
Select a table or view from the list.
Help
Connection Managers
(project) LocalHost.AdventureWorksDW2012
Solution Explorer
Getting Started (SSIS)
Ready


470_ETL_DB (Running) - Microsoft Visual Studio
Package.dtsx [Design]
OLE DB Source
2,191 rows
OLE DB Destination
Connection Managers
(project) DESKTOP-R6DS8MP.AdventureWorksDW2012
DESKTOP-R6DS8MP.AdventureWorksDW2012 1
Package execution completed. Click here to switch to design mode, or select Stop Debugging from the Debug menu.
Autos
Call Stack
Solution Explorer
Ready


470_ETL_DB (Running) - Microsoft Visual Studio
File Edit View Project Build Debug Data Format SSIS Tools Window Help
Package.dtsx [Design]
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Progress
Data Flow Task:
Data Flow Task
OLE DB Source
2,191 rows
OLE DB Destination
Connection Managers
(project) DESKTOP-R6DS8MP.AdventureWorksDW2012
DESKTOP-R6DS8MP.AdventureWorksDW2012 1
Package execution completed. Click here to switch to design mode, or select Stop Debugging from the Debug menu.
Solution Explorer
Solution '470_ETL_DB' (1 pr
470_ETL_DB
Project.params
Connection Manag
SSIS Packages
Package.dtsx
Miscellaneous
Autos
Name
Value
Type
Autos
Locals
Watch 1
Call Stack
Name
Lang
Call Stack
Breakpoints
Command Window
Immediate Window
Output
Ready
Type here to search
25°C Haze
9:39 AM
1/13/2024

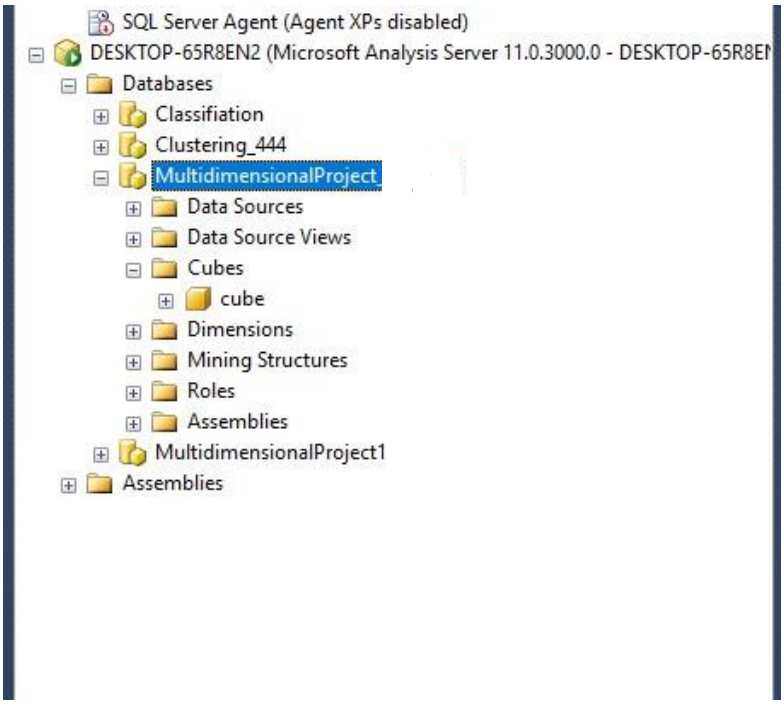

shreyash_470 - Microsoft Visual Studio
File Edit View Project Build Debug Data Format SSIS Tools Window Help
Development
Default
Package.dtsx [Design]
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Add SSIS Connection Manager
Select the type of connection manager to add to the package.
Connection manager type:
Type
Description
ADO.NET
Connection manager for ADO.NET connections
CACHE
Connection manager for cache
DQS
Connection manager for DQS server
EXCEL
Connection manager for Excel files
FILE
Connection manager for files
FLATFILE
Connection manager for flat files
FTP
Connection manager for FTP connections
HTTP
Connection manager for HTTP connections
MSMQ
Connection manager for the Message Queue t...
MSOLAP100
Connection manager for Analysis Services con...
MULTIFILE
Connection manager for multiple files
MULTIFLATFILE
Connection manager for multiple flat files
ODBC
Connection manager for ODBC connections
OLEDB
Connection manager for OLE DB connections
SMOServer
Connection manager for SQL Server transfer ta...
Add...
Cancel
No Data Flow
Solution Explorer
Solution 'shreyash_470' (1 project)
shreyash_470
Project.params
Connection Managers
SSIS Packages
Package.dtsx
Miscellaneous
Properties
Connection Managers
Name
Specifies the name of the folder.
Ready
Type here to search
Breaking news
9:00 AM
1/13/2024

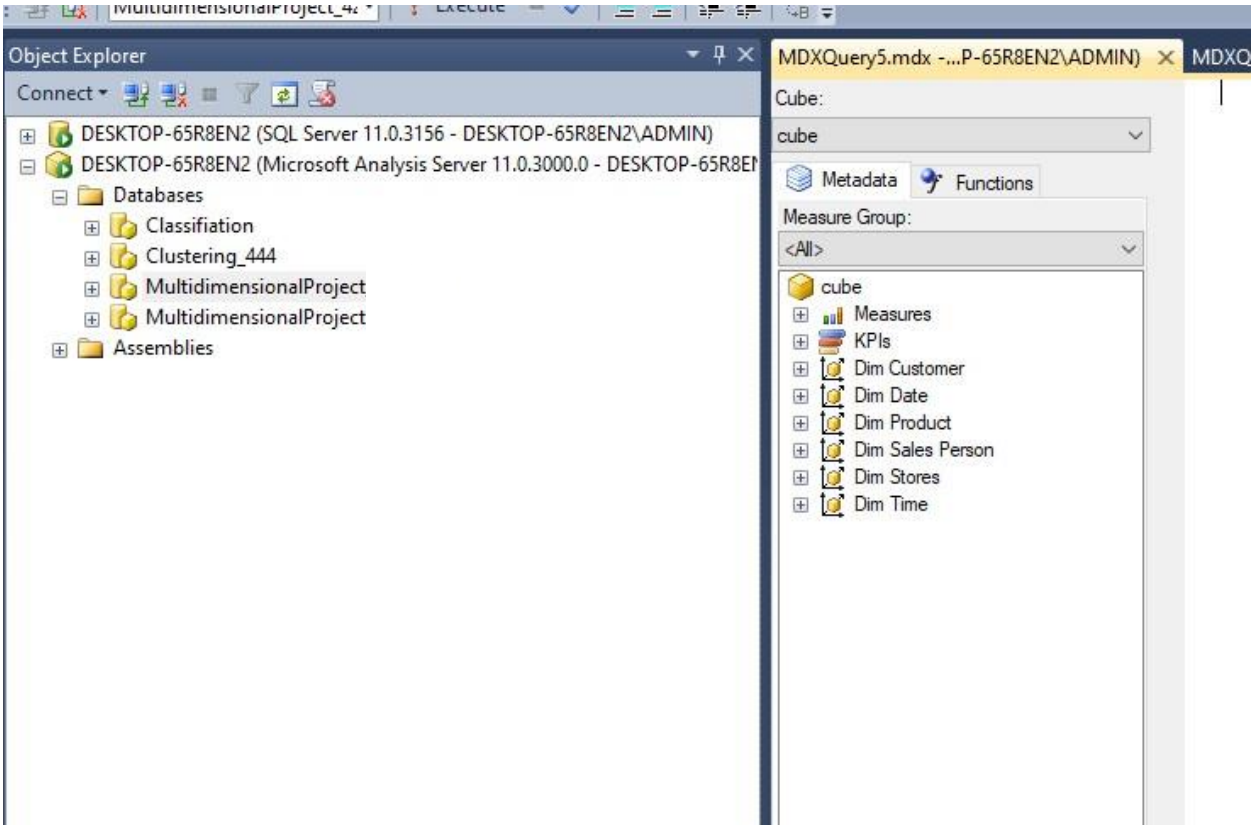

shreyash_470 - Microsoft Visual Studio
File Edit View Project Build Debug Data Format SSIS Tools Window Help
Development
Default
Package.dtsx [Design]
Control Flow
Data Flow
Parameters
Event Handlers
Package Explorer
Configure OLE DB Connection Manager
To create a connection manager based on previously defined connection information, select a data connection, and then click OK. To create a new connection manager, click New.
Data connections:
DESKTOP-R6DS8MP.AdventureWorksDW2012
LocalHost.AdventureWorksDW2012
Data connection properties:
Property
Value
Data Source
.
Initial Catalog
AdventureWorksDW20...
Integrated Se...
SSPI
Provider
SQLNCLI11.1
New...
Delete
OK
Cancel
Solution Explorer
Solution 'shreyash_470' (1 project)
shreyash_470
Project.params
Connection Managers
SSIS Packages
Package.dtsx
Miscellaneous
Properties
Connection Managers
Name
Specifies the name of the folder.
Ready
Type here to search
Breaking news
9:00 AM
1/13/2024

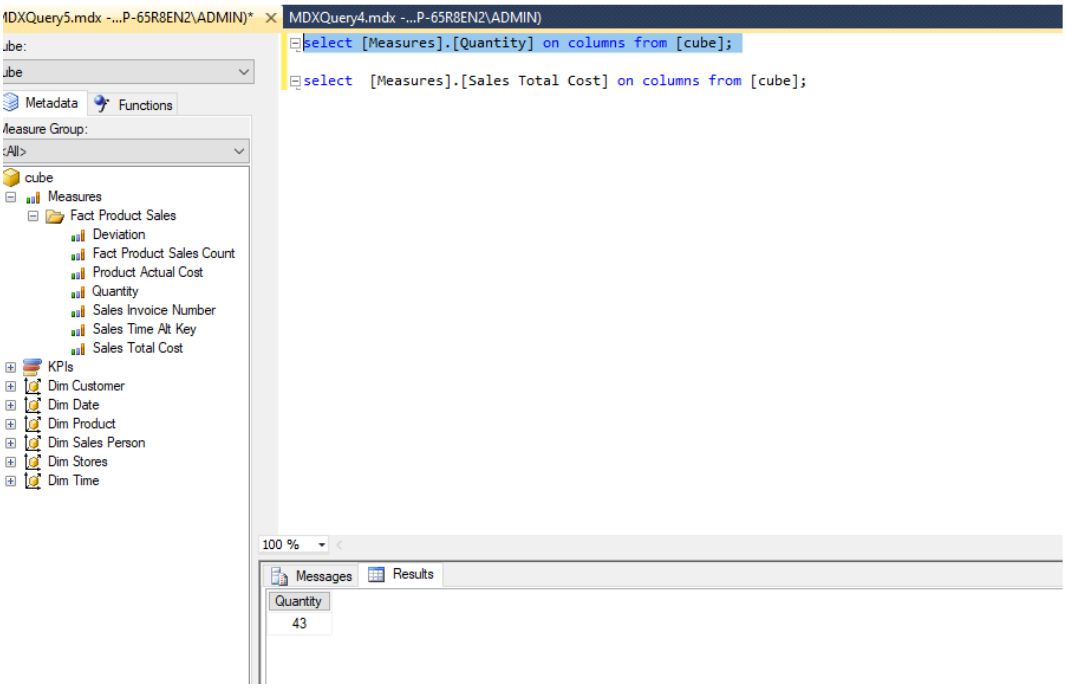
Practical no 4

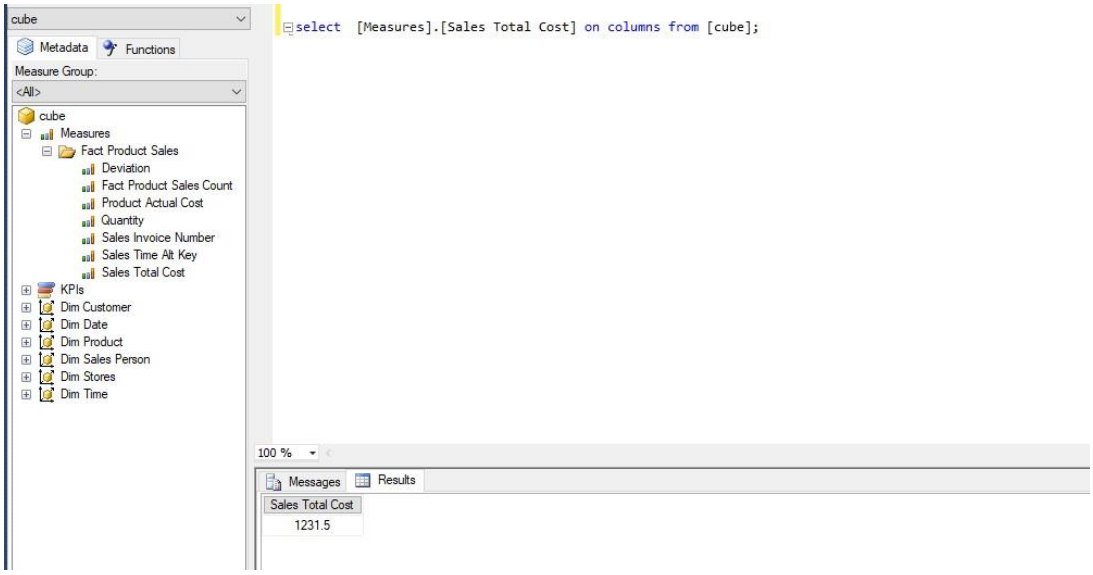
Shreyash phatak 470

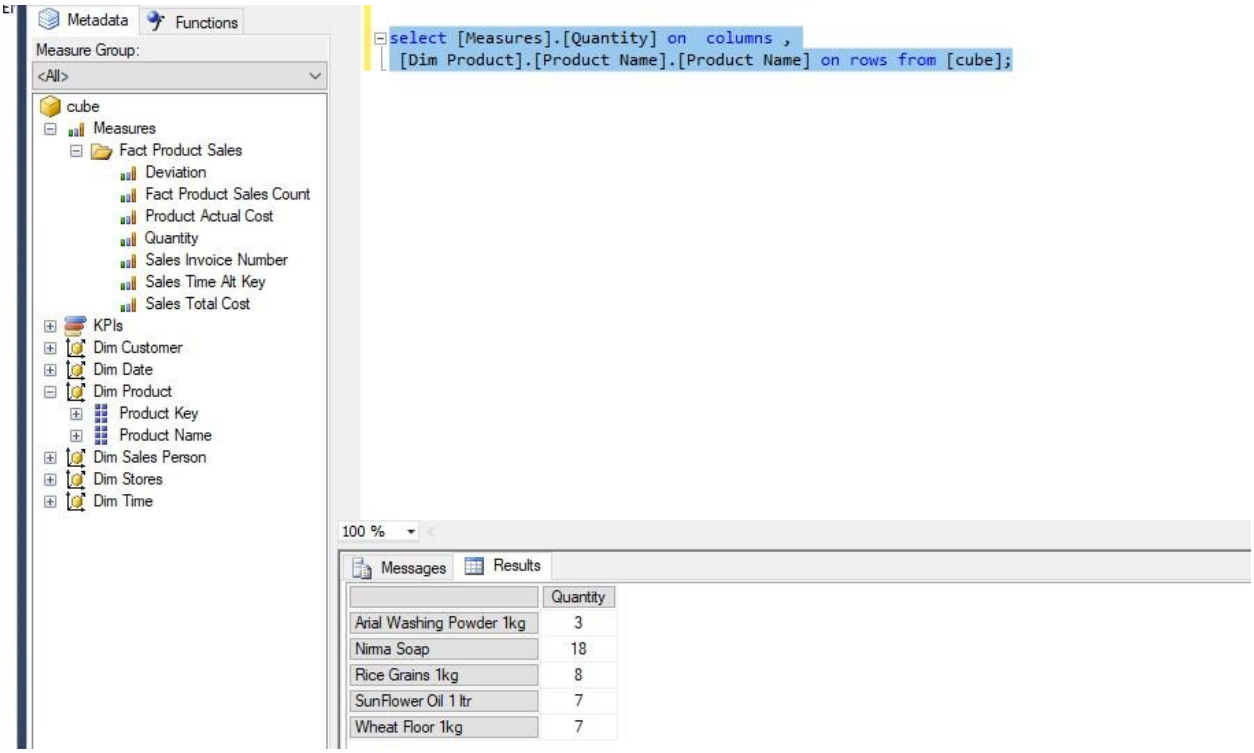
Q. Execute the MDX queries to extract the data from the datawarehouse

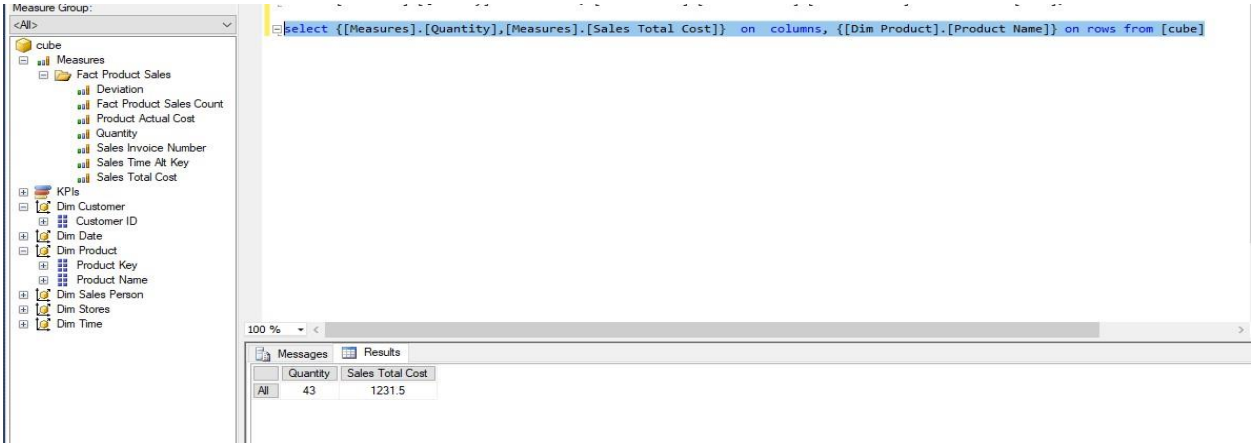


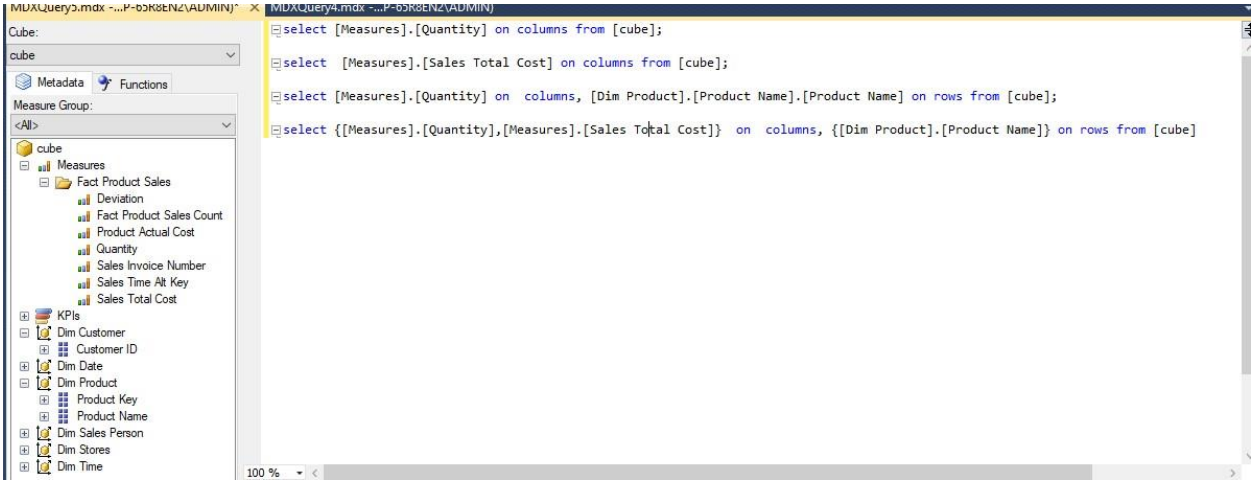




MDXQuery5.mdx -...P-65R8EN2\ADMIN)*
MDXQuery4.mdx -...P-65R8EN2\ADMIN)
Metadata
Functions
Measure Group:
<All>
cube
Measures
Fact Product Sales
Deviation
Fact Product Sales Count
Product Actual Cost
Quantity
Sales Invoice Number
Sales Time Alt Key
Sales Total Cost
KPIs
Dim Customer
Dim Date
Dim Product
Dim Sales Person
Dim Stores
Dim Time
select [Measures].[Quantity] on columns from [cube];
select [Measures].[Sales Total Cost] on columns from [cube];
100 %
Messages
Results
Quantity
43


cube
Metadata
Functions
Measure Group:
<All>
cube
Measures
Fact Product Sales
Deviation
Fact Product Sales Count
Product Actual Cost
Quantity
Sales Invoice Number
Sales Time Alt Key
Sales Total Cost
KPIs
Dim Customer
Dim Date
Dim Product
Dim Sales Person
Dim Stores
Dim Time
select [Measures].[Sales Total Cost] on columns from [cube];
100 %
Messages
Results
Sales Total Cost
1231.5


Metadata
Functions
Measure Group:
<All>
cube
Measures
Fact Product Sales
Deviation
Fact Product Sales Count
Product Actual Cost
Quantity
Sales Invoice Number
Sales Time Alt Key
Sales Total Cost
KPIs
Dim Customer
Dim Date
Dim Product
Product Key
Product Name
Dim Sales Person
Dim Stores
Dim Time
select [Measures].[Quantity] on columns ,
[Dim Product].[Product Name].[Product Name] on rows from [cube];
100 %
Messages
Results
Quantity
Arial Washing Powder 1kg 3
Nirma Soap 18
Rice Grains 1kg 8
SunFlower Oil 1 ltr 7
Wheat Floor 1kg 7

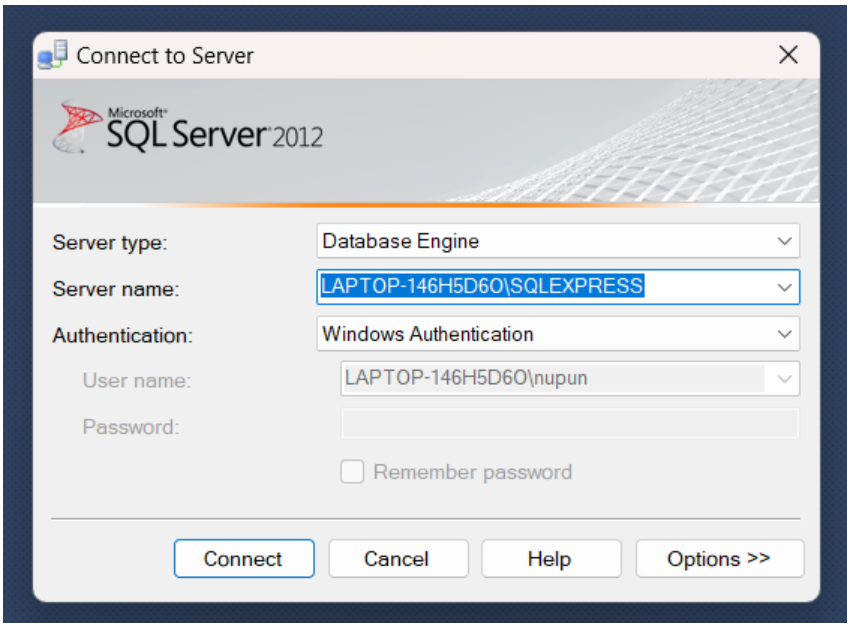

Measure Group:
<All>
cube
Measures
Fact Product Sales
Deviation
Fact Product Sales Count
Product Actual Cost
Quantity
Sales Invoice Number
Sales Time Alt Key
Sales Total Cost
KPIs
Dim Customer
Customer ID
Dim Date
Dim Product
Product Key
Product Name
Dim Sales Person
Dim Stores
Dim Time
select {[Measures].[Quantity],[Measures].[Sales Total Cost]} on columns, {[Dim Product].[Product Name]} on rows from [cube]
100 %
Messages
Results
Quantity
Sales Total Cost
All 43 1231.5

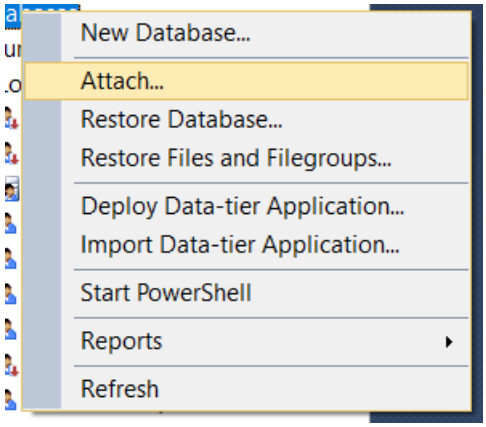

Cube:
cube
Metadata
Functions
Measure Group:
<All>
cube
Measures
Fact Product Sales
Deviation
Fact Product Sales Count
Product Actual Cost
Quantity
Sales Invoice Number
Sales Time Alt Key
Sales Total Cost
KPIs
Dim Customer
Customer ID
Dim Date
Dim Product
Product Key
Product Name
Dim Sales Person
Dim Stores
Dim Time
select [Measures].[Quantity] on columns from [cube];
select [Measures].[Sales Total Cost] on columns from [cube];
select [Measures].[Quantity] on columns, [Dim Product].[Product Name].[Product Name] on rows from [cube];
select {[Measures].[Quantity],[Measures].[Sales Total Cost]} on columns, {[Dim Product].[Product Name]} on rows from [cube]
100 %

Shreyash Phatak 470

# Practical 1

Import legacy data from different sources such as (SqlServer) and load in the target system. (You can download sample database such as Adventureworks, Northwind etc.)



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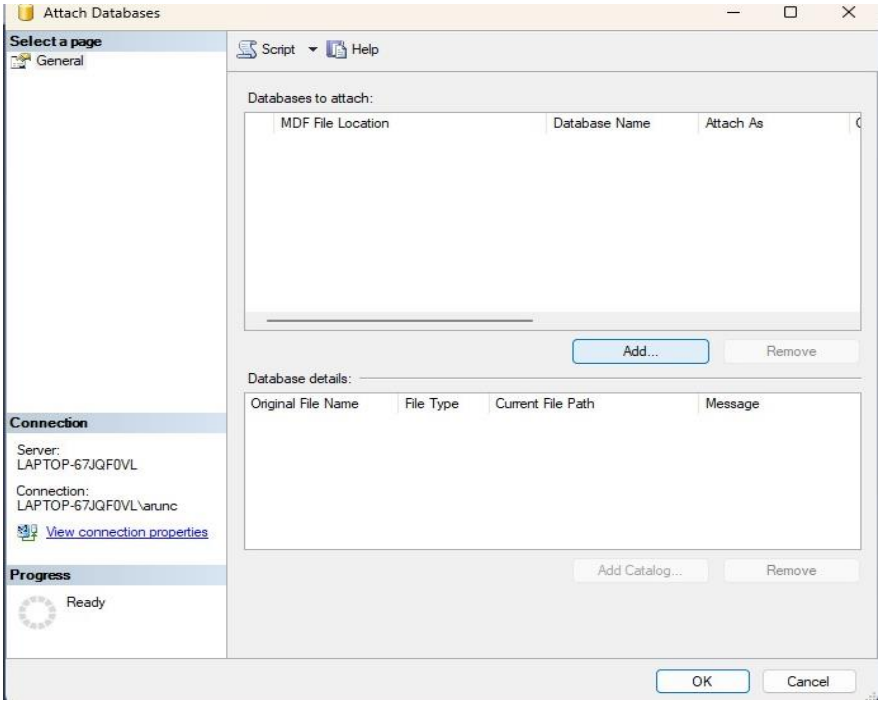


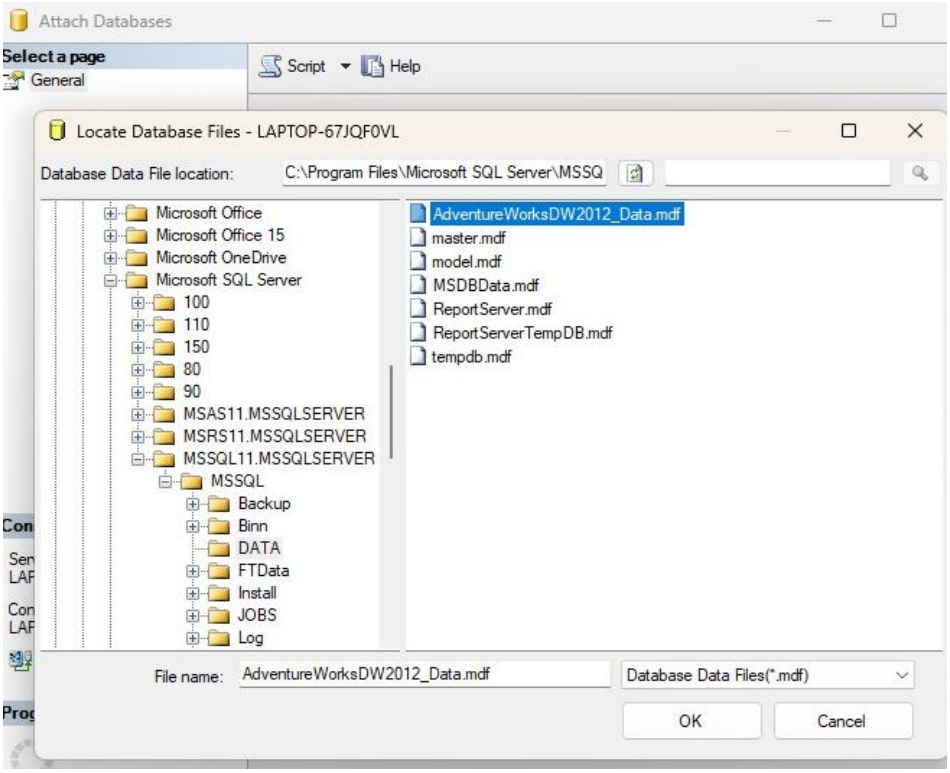

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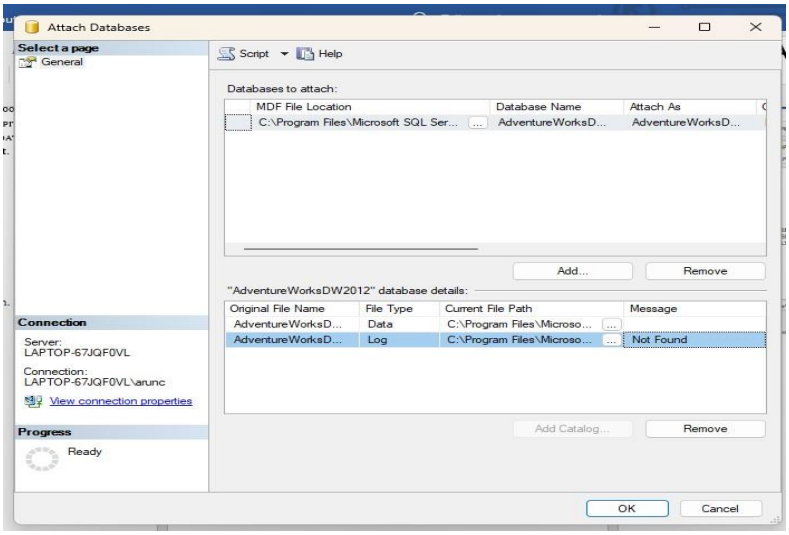


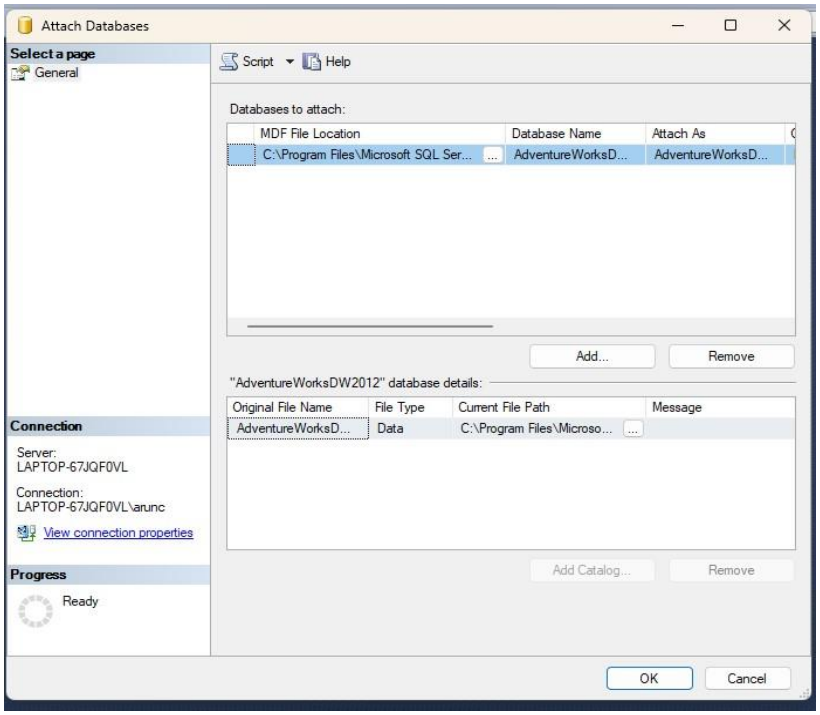


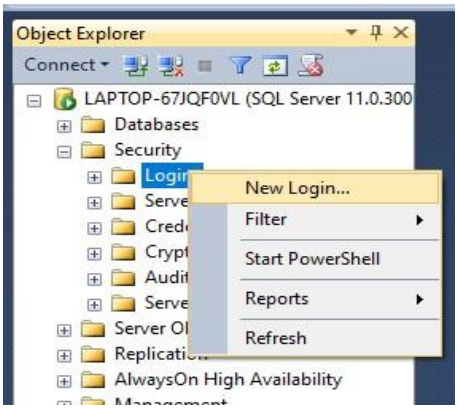

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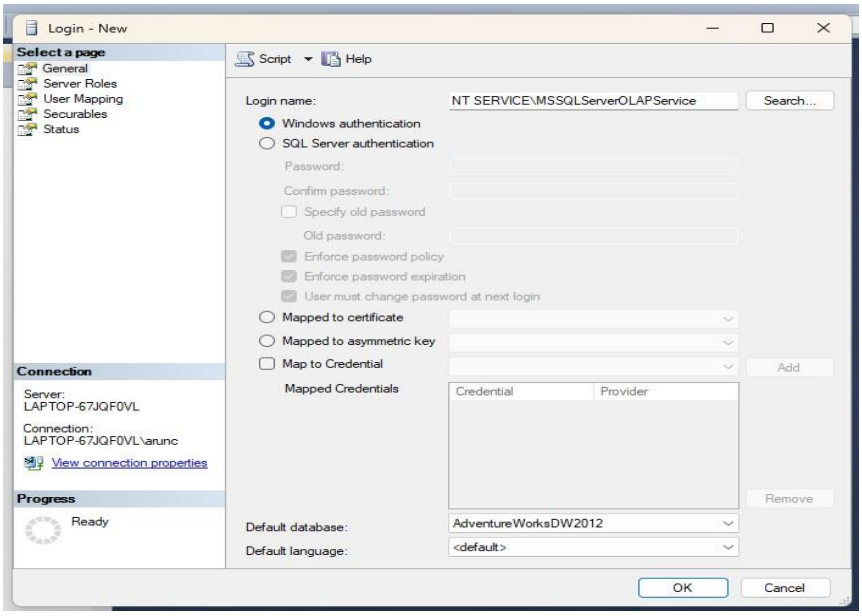


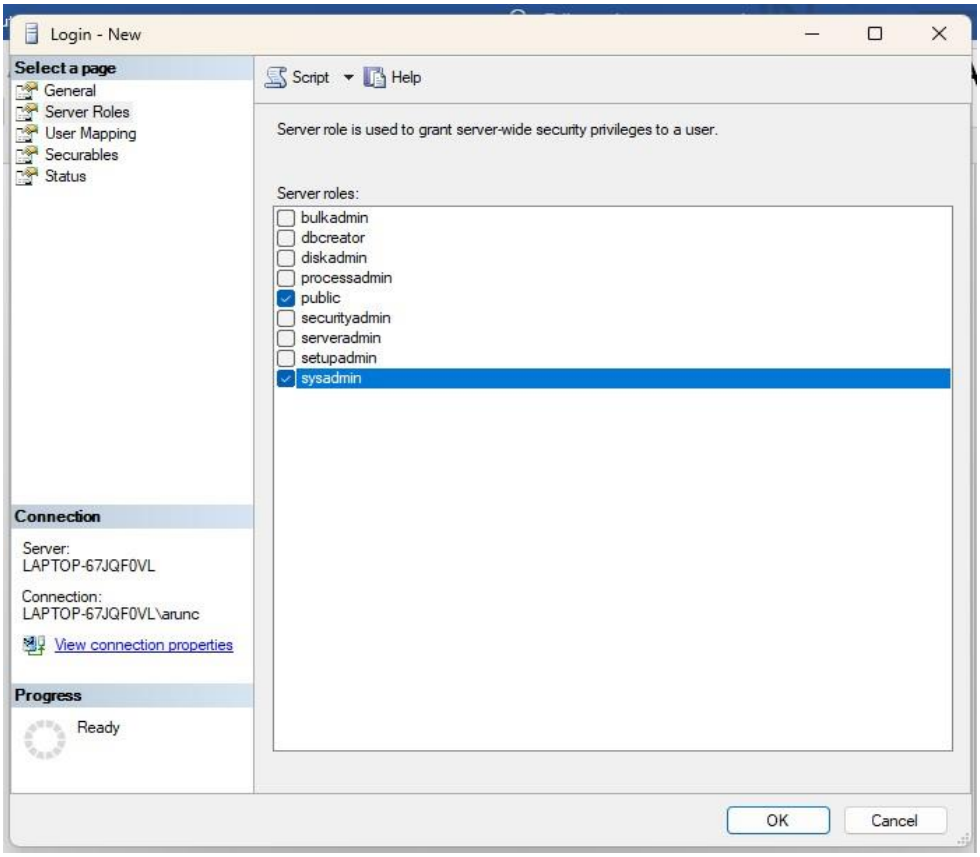

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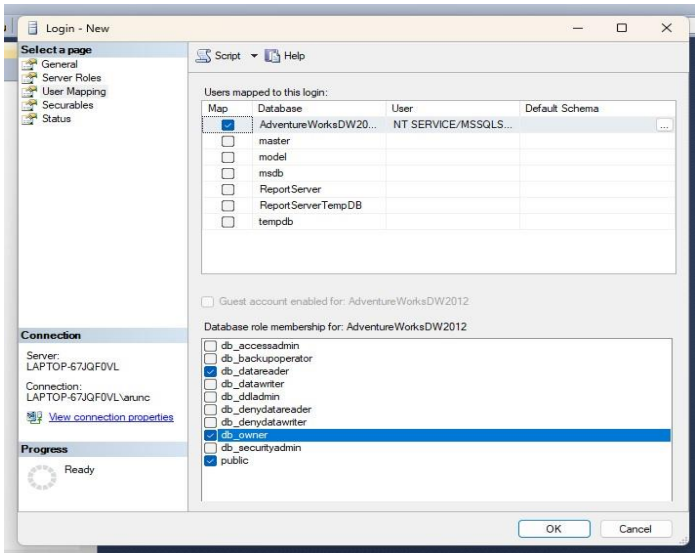
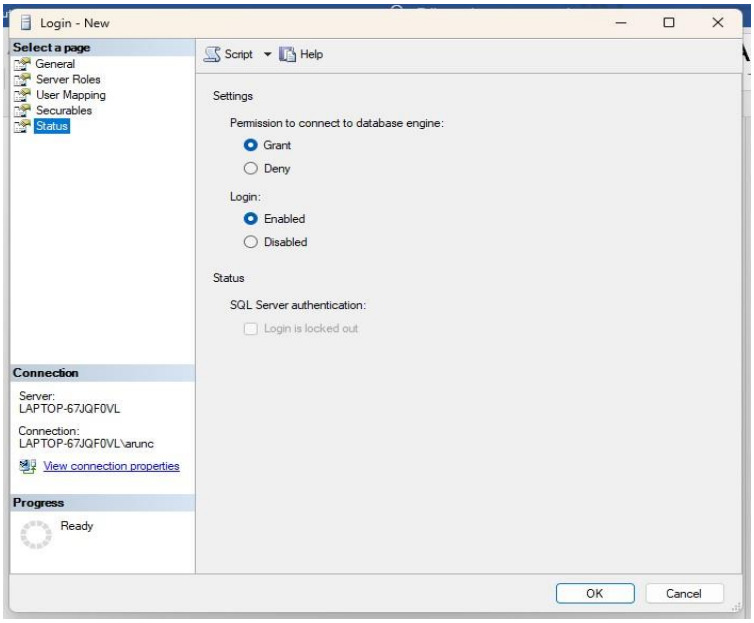
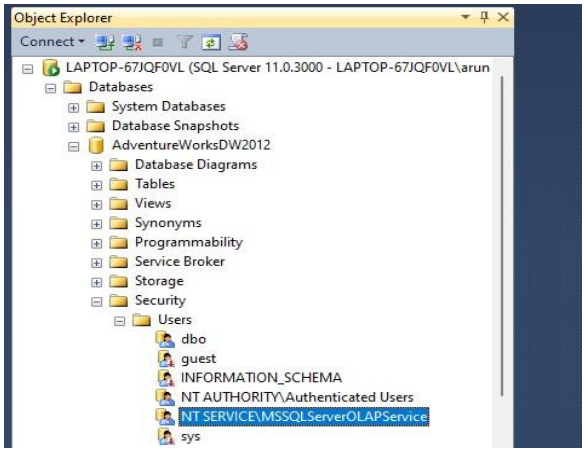
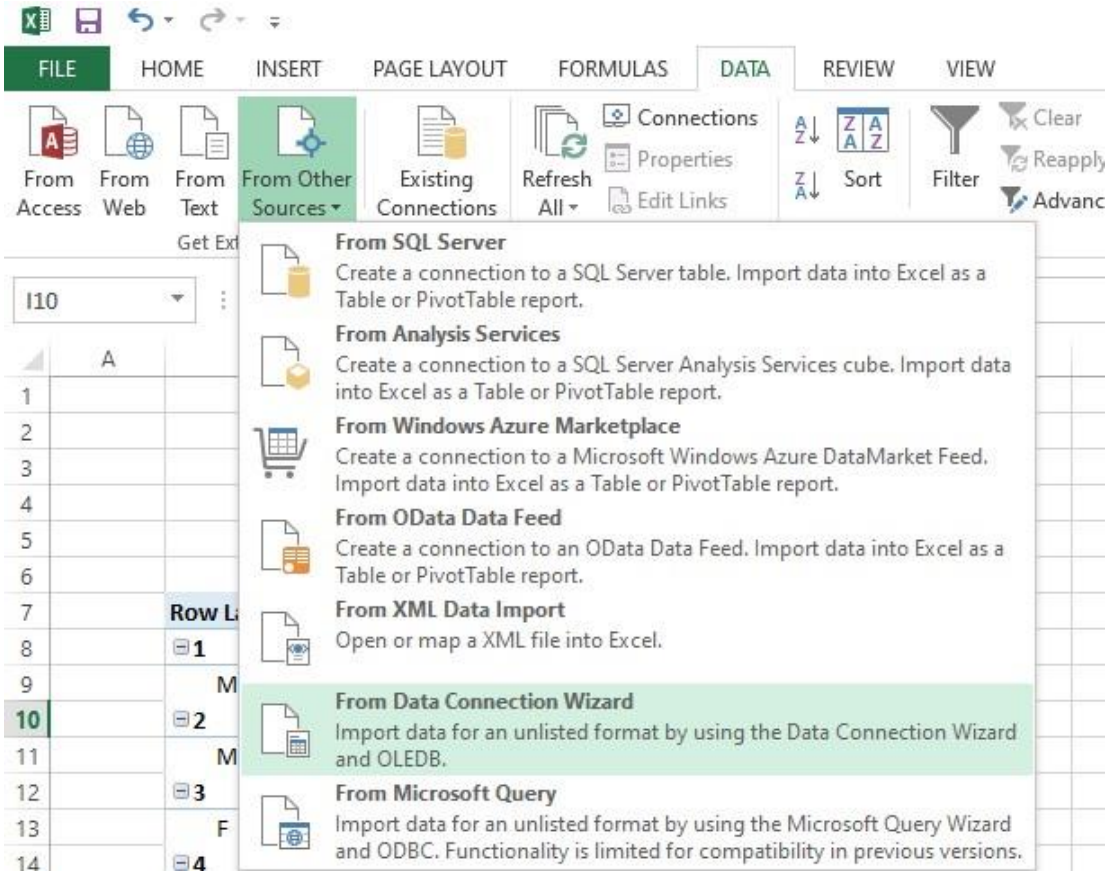


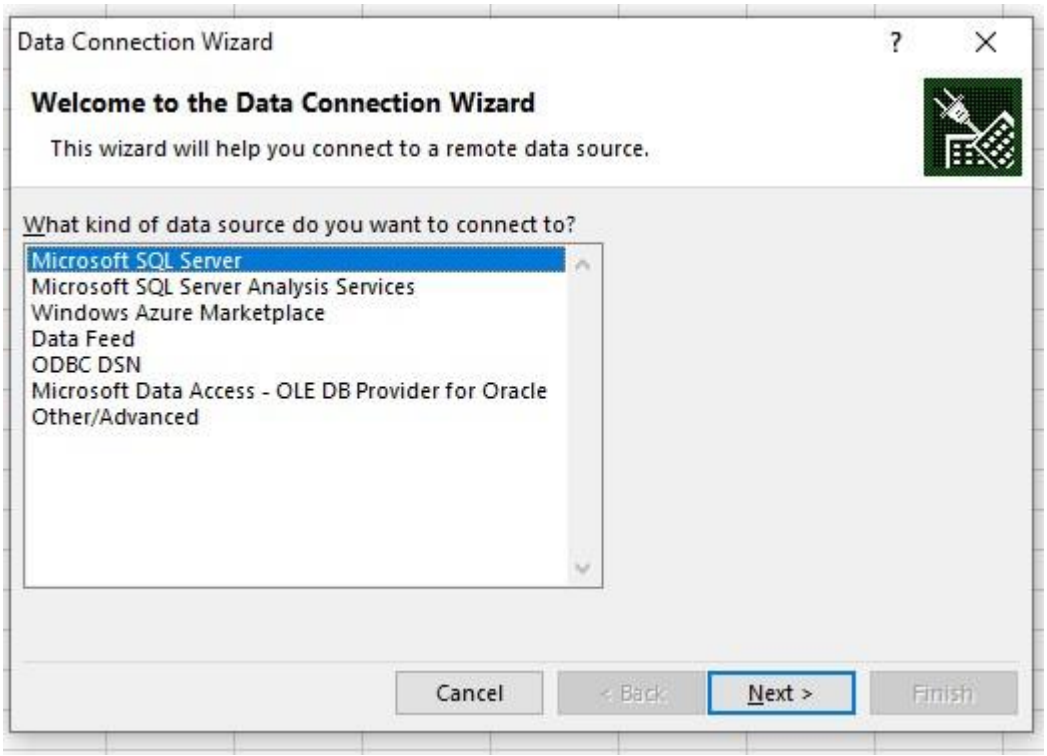



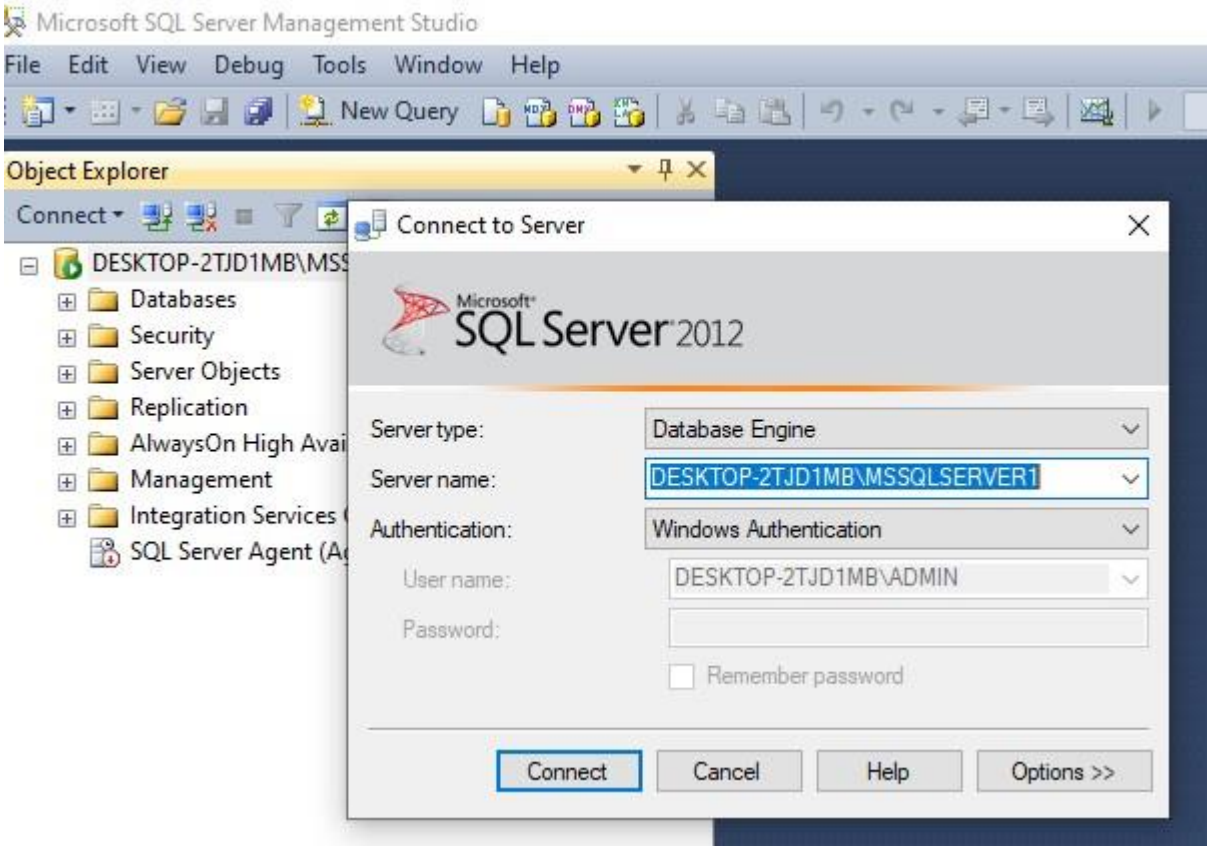
**Shreyash phatak 470**

# BI Practical 5.A

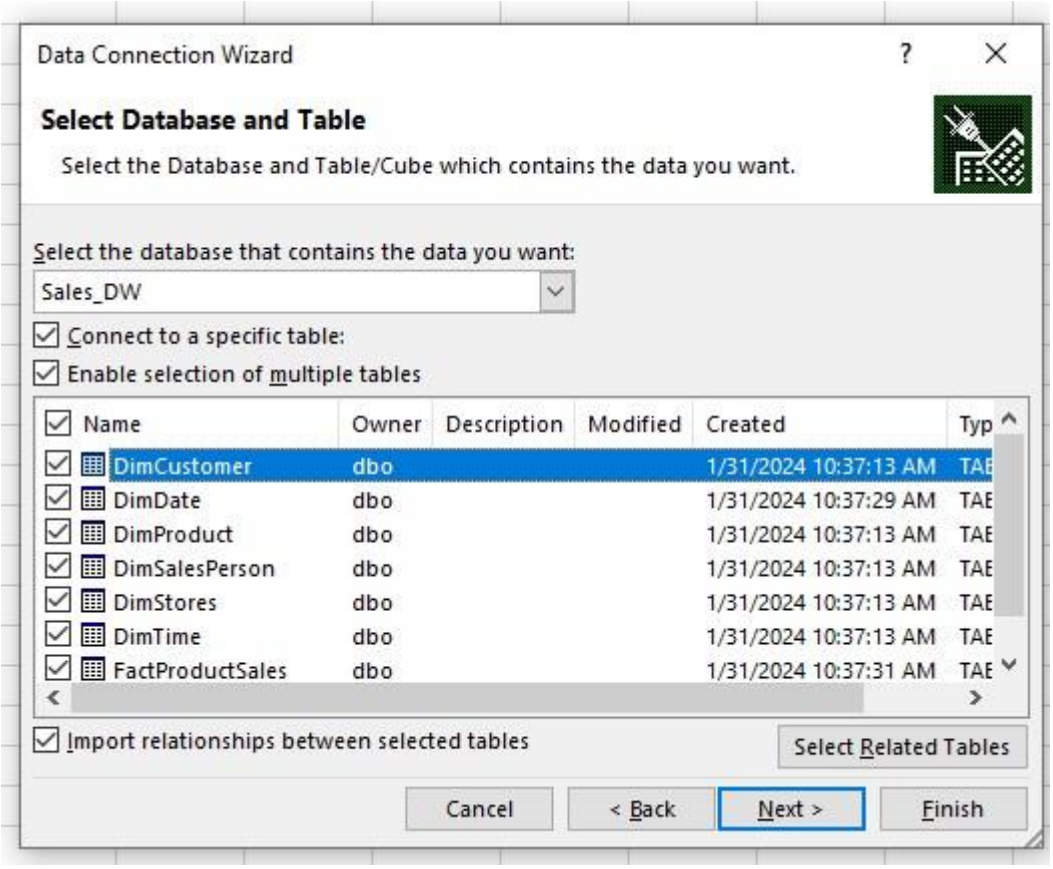


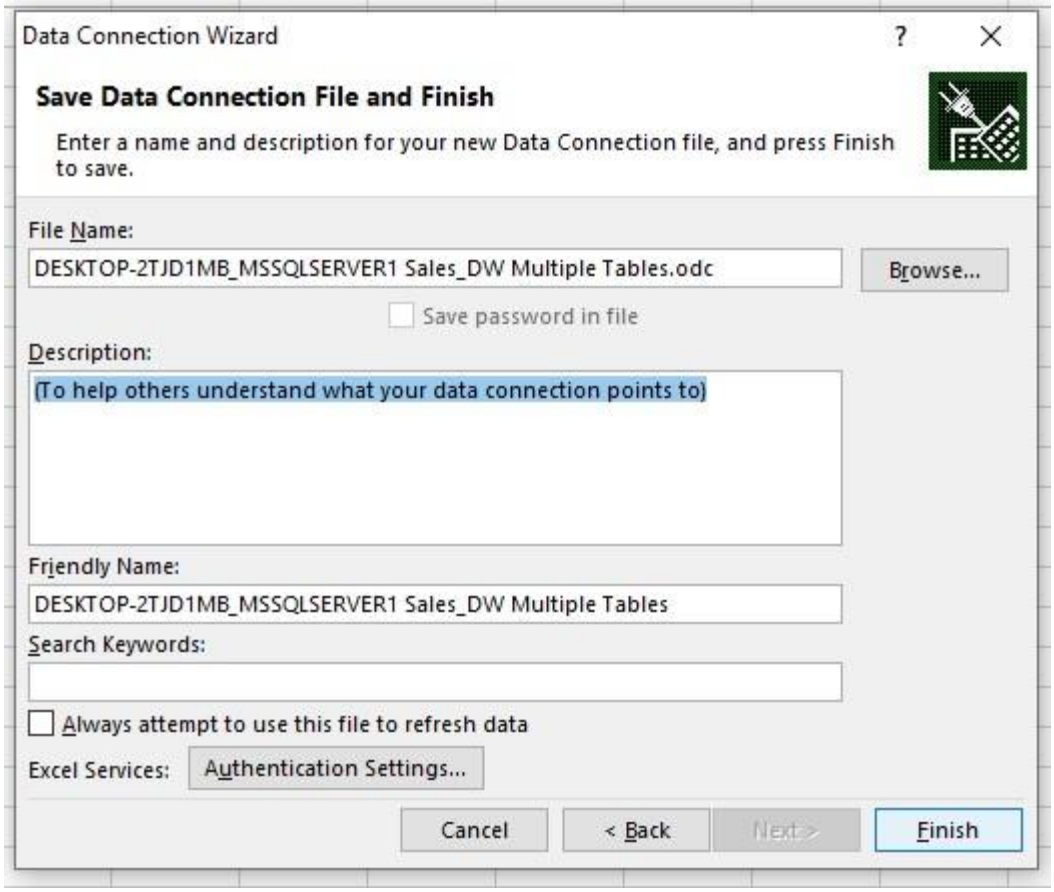
**Shreyash phatak 470**

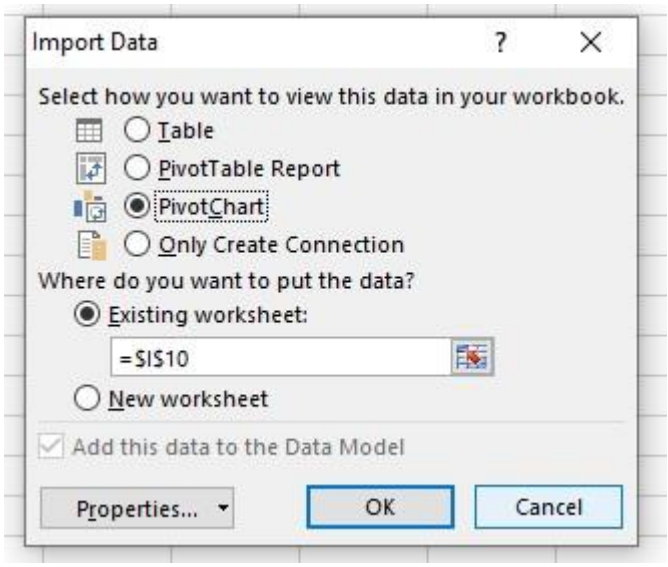



**Shreyash phatak 470**

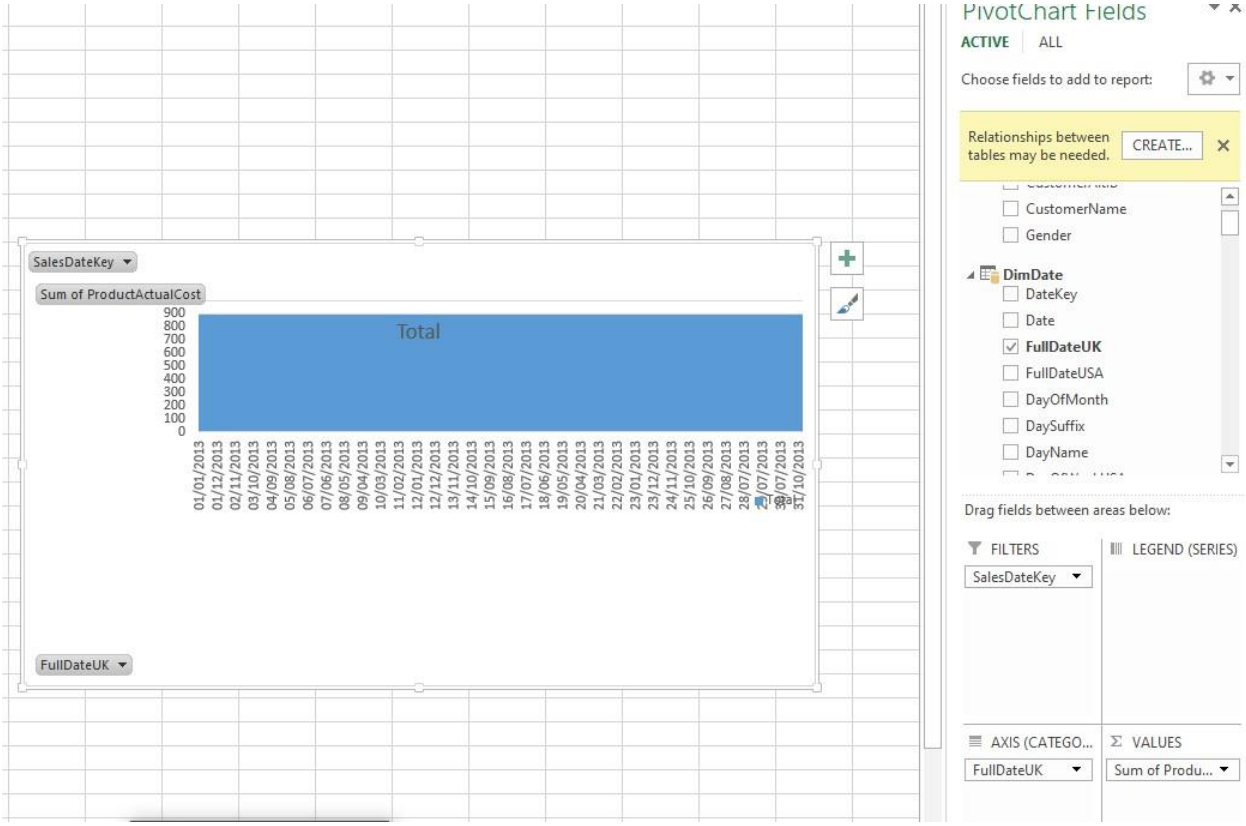


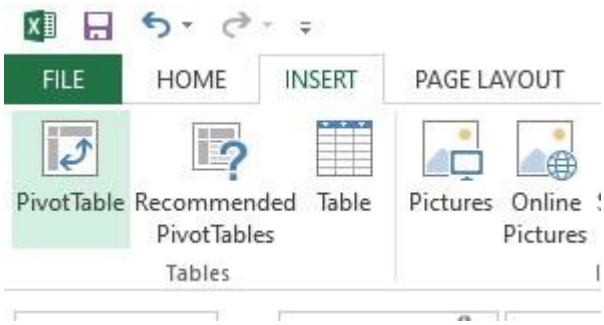
**Shreyash phatak 470**



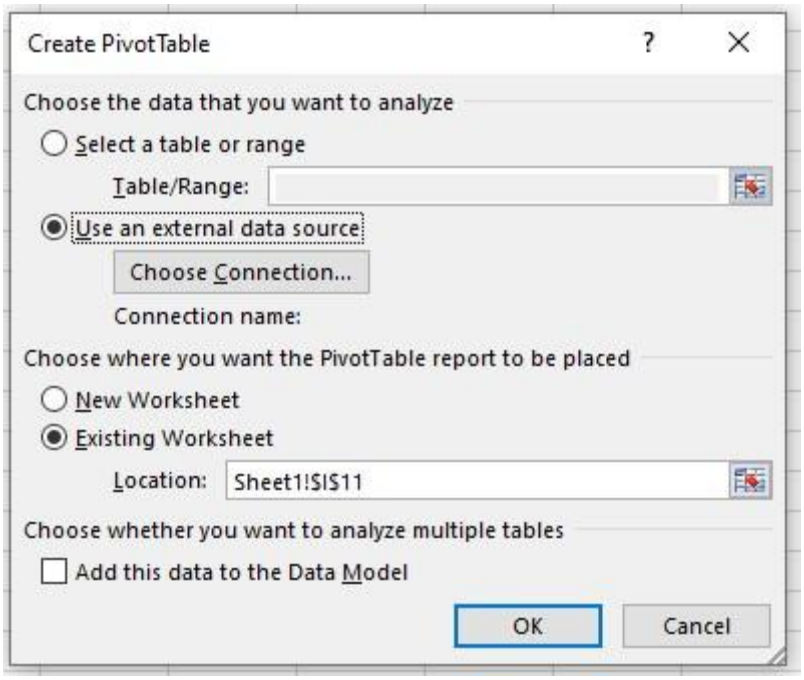



# Shreyash phatak 470

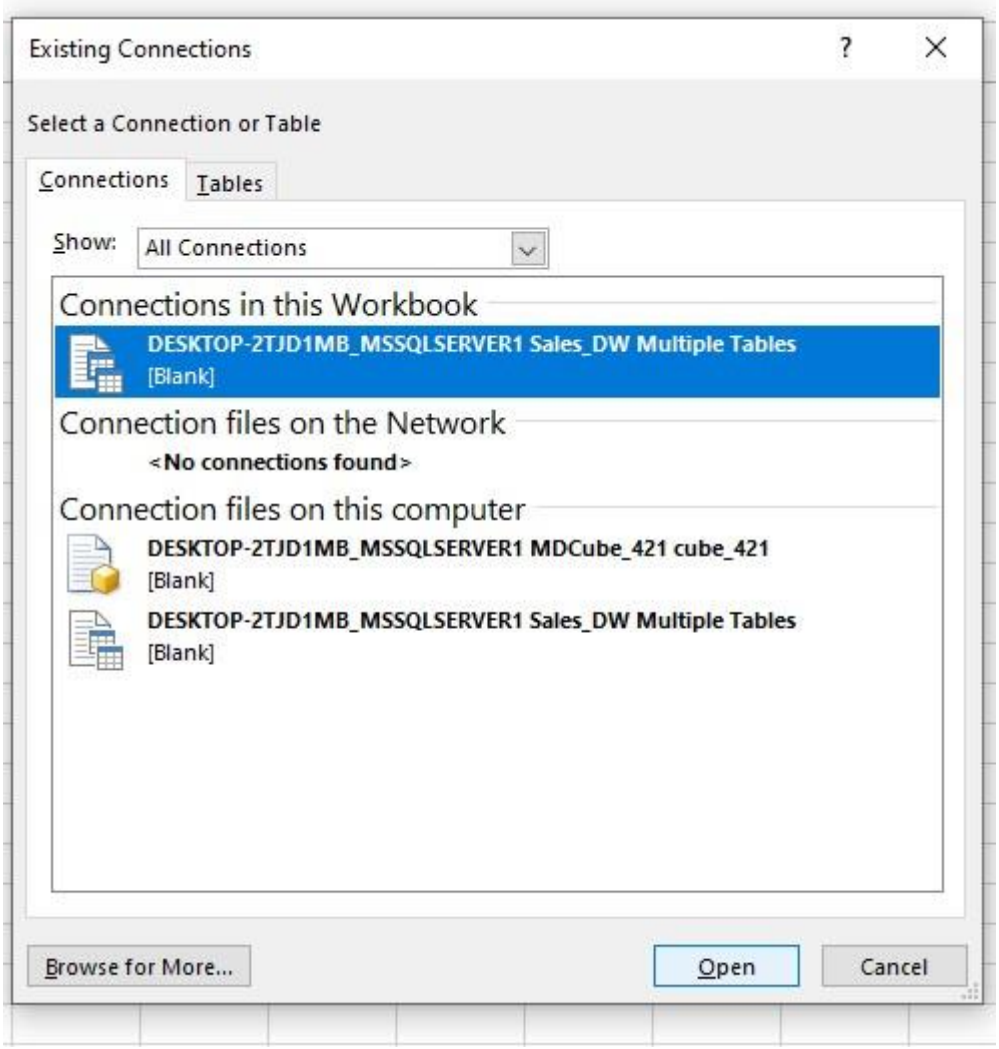


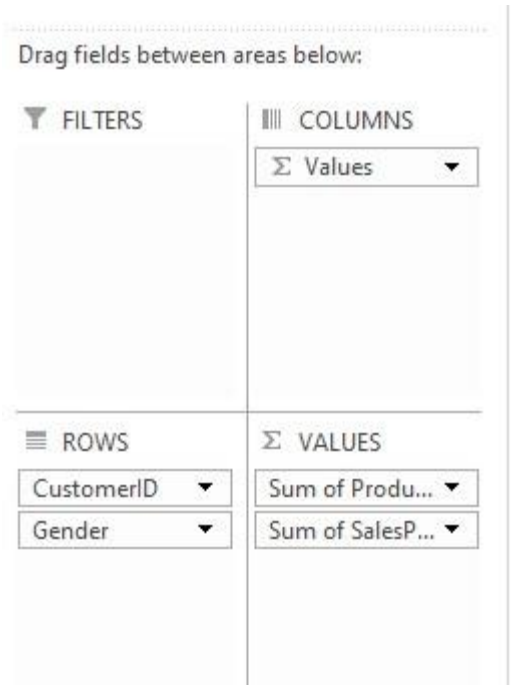
**Shreyash phatak 470**



**Shreyash phatak 470**



**Shreyash phatak 470**

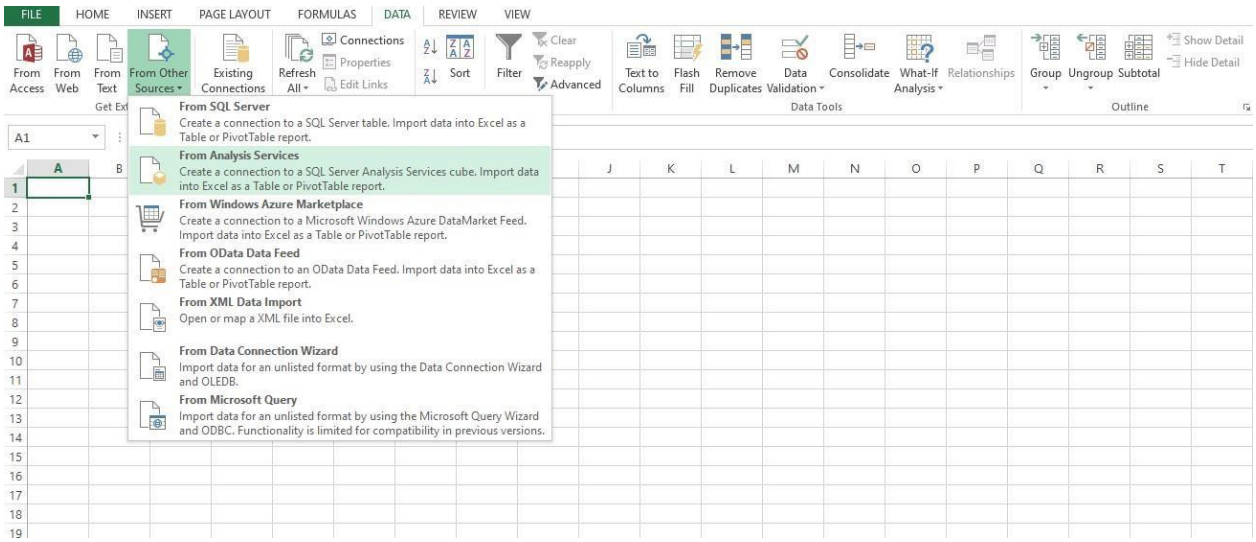


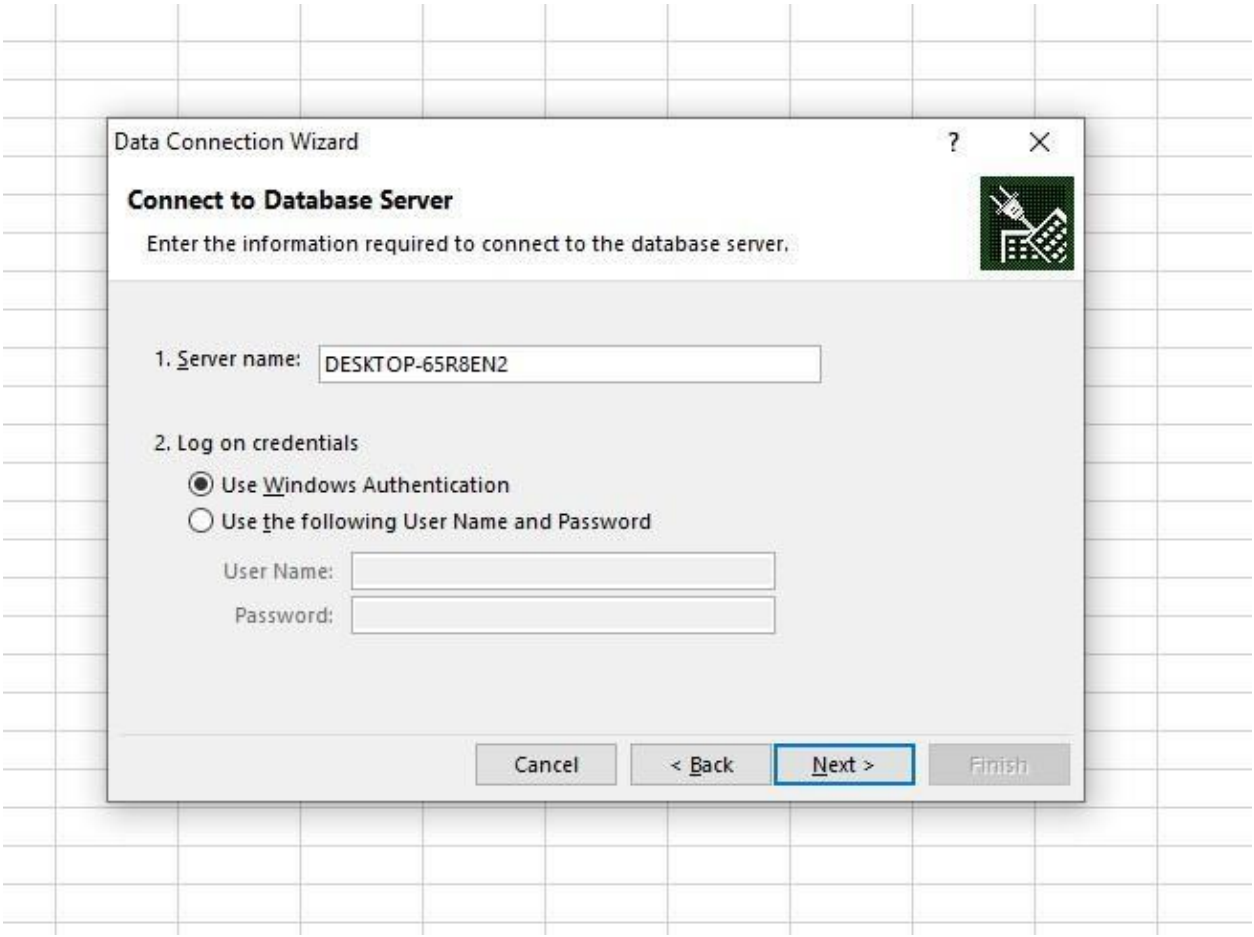

| Row Labels | Sum of ProductKey | Sum of SalesPersonID |
|---|---|---|
| **1** | **210** | **300** |
| M | 210 | 300 |
| **2** | **210** | **300** |
| M | 210 | 300 |
| **3** | **210** | **300** |
| F | 210 | 300 |
| **4** | **210** | **300** |
| M | 210 | 300 |
| **5** | **210** | **300** |
| F | 210 | 300 |
| **6** | **210** | **300** |
| M | 210 | 300 |
| **7** | **210** | **300** |
| M | 210 | 300 |
| **8** | **210** | **300** |
| F | 210 | 300 |
| **9** | **210** | **300** |
| M | 210 | 300 |
| **10** | **210** | **300** |
| F | 210 | 300 |
| **11** | **210** | **300** |
| M | 210 | 300 |
| **12** | **210** | **300** |

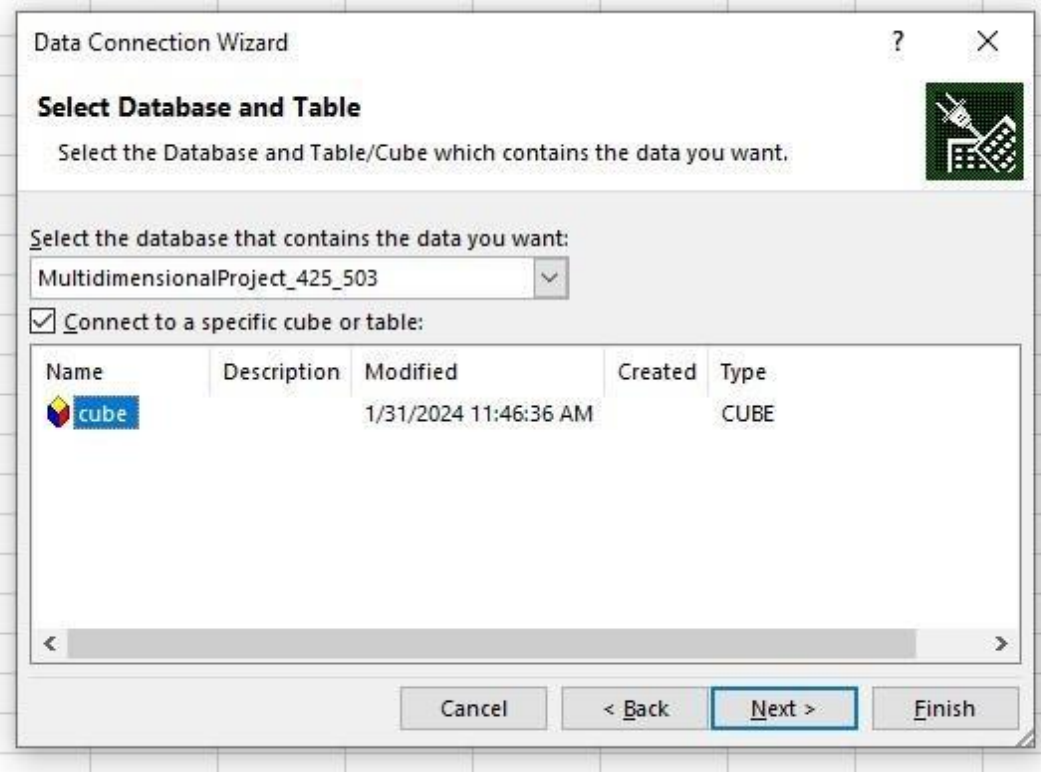
PRAC 5 B

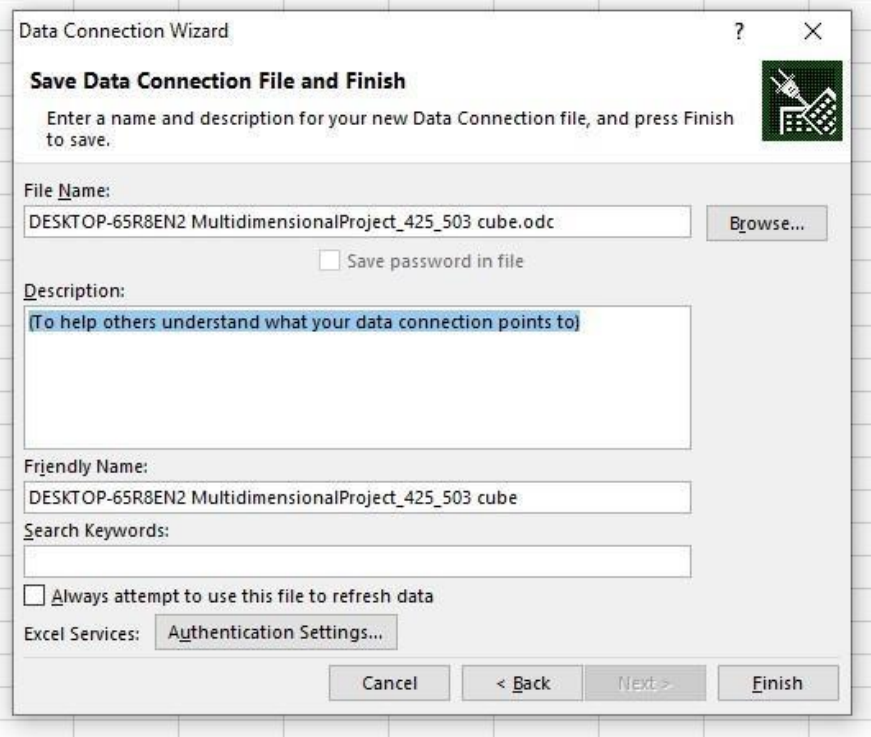
Shreyash Phatak 470

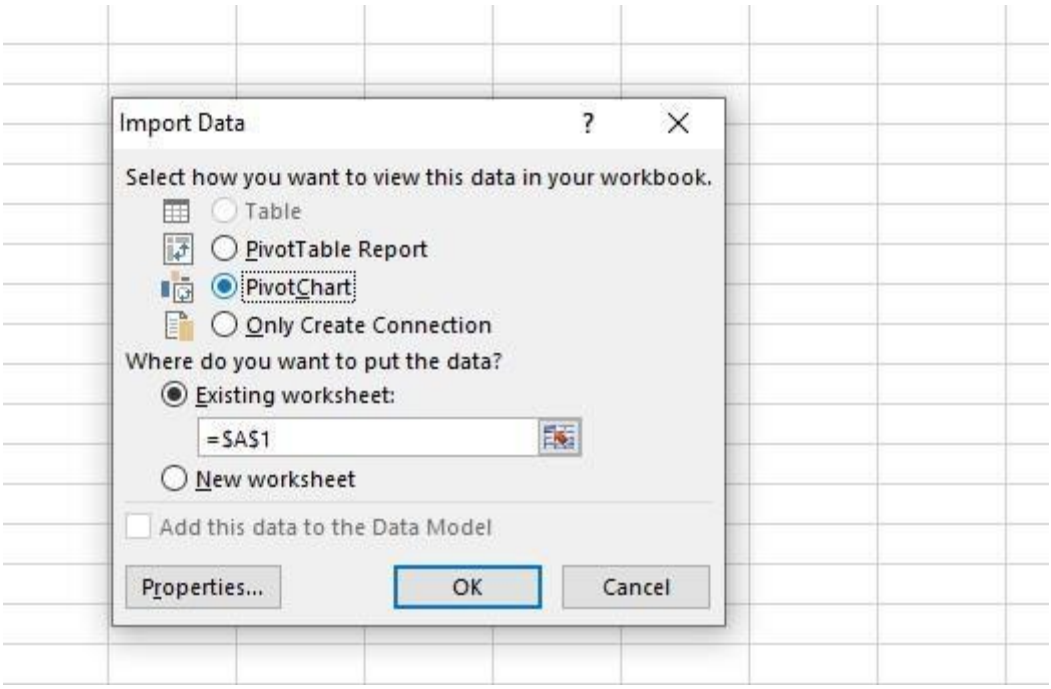
Q. Import the cube in Ms Excel and create the Pivot table and Pivot Chart

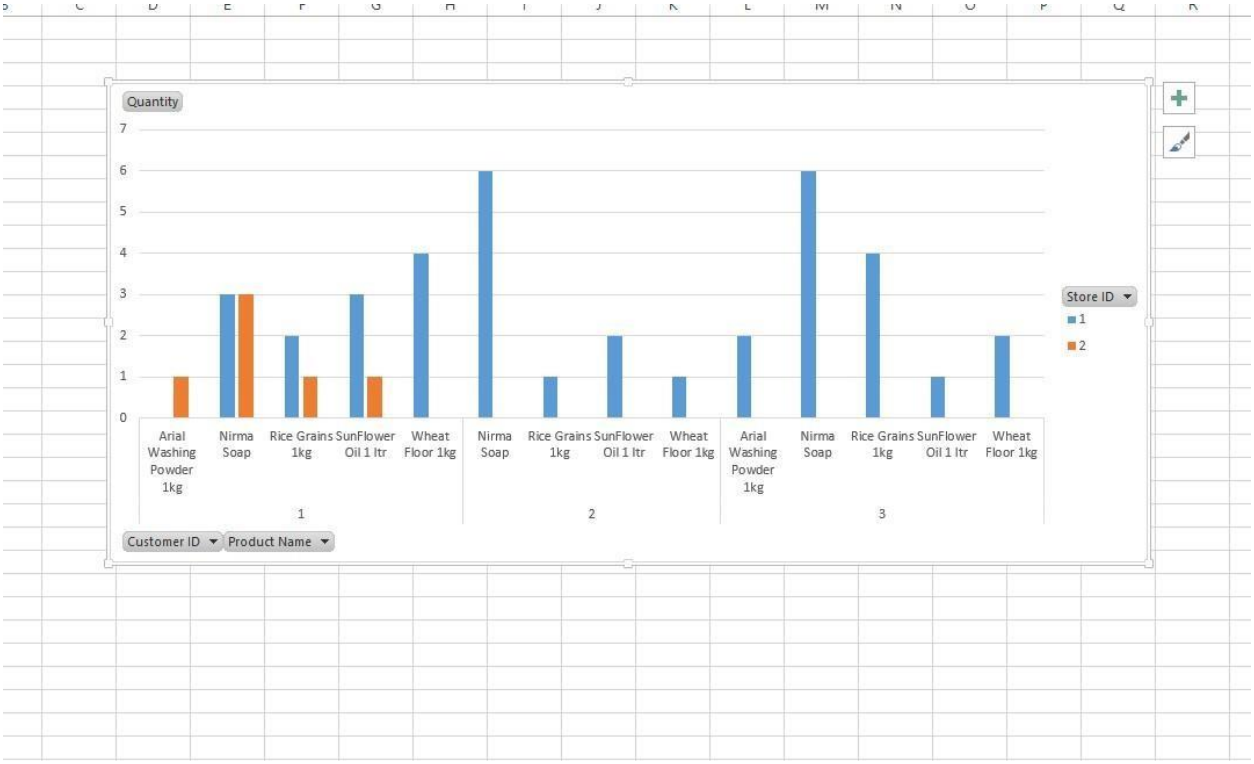




Data Connection Wizard
Connect to Database Server
Enter the information required to connect to the database server.
1. Server name:
DESKTOP-65R8EN2
2. Log on credentials
Use Windows Authentication
Use the following User Name and Password
User Name:
Password:
Cancel
< Back
Next >
Finish


Data Connection Wizard
Select Database and Table
Select the Database and Table/Cube which contains the data you want.
Select the database that contains the data you want:
MultidimensionalProject_425_503
Connect to a specific cube or table:
Name
Description
Modified
Created
Type
cube
1/31/2024 11:46:36 AM
CUBE
Cancel
< Back
Next >
Finish

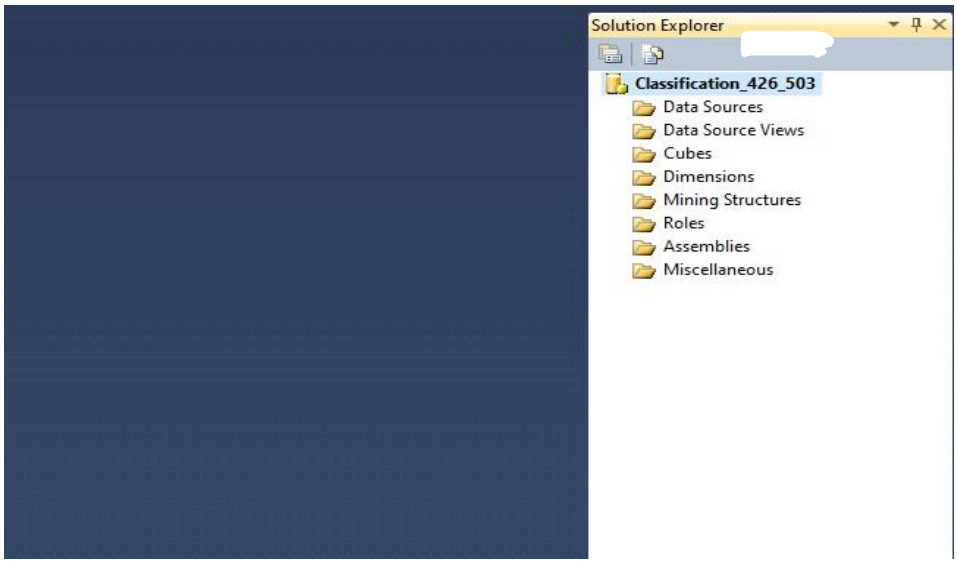

Data Connection Wizard
Save Data Connection File and Finish
Enter a name and description for your new Data Connection file, and press Finish to save.
File Name:
DESKTOP-65R8EN2 MultidimensionalProject_425_503 cube.odc
Browse...
Save password in file
Description:
(To help others understand what your data connection points to)
Friendly Name:
DESKTOP-65R8EN2 MultidimensionalProject_425_503 cube
Search Keywords:
Always attempt to use this file to refresh data
Excel Services:
Authentication Settings...
Cancel
< Back
Next >
Finish

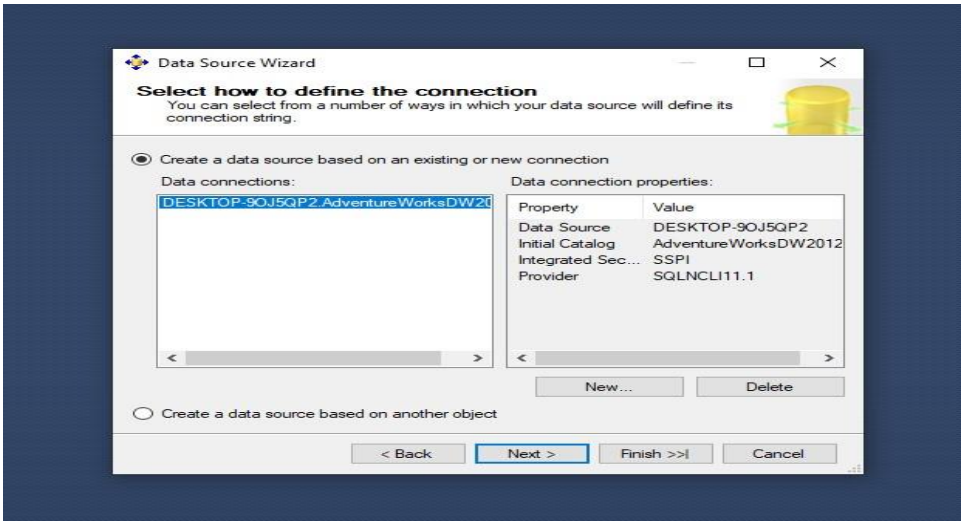

Import Data
Select how you want to view this data in your workbook.
Table
PivotTable Report
PivotChart
Only Create Connection
Where do you want to put the data?
Existing worksheet:
=$A$1
New worksheet
Add this data to the Data Model
Properties...
OK
Cancel

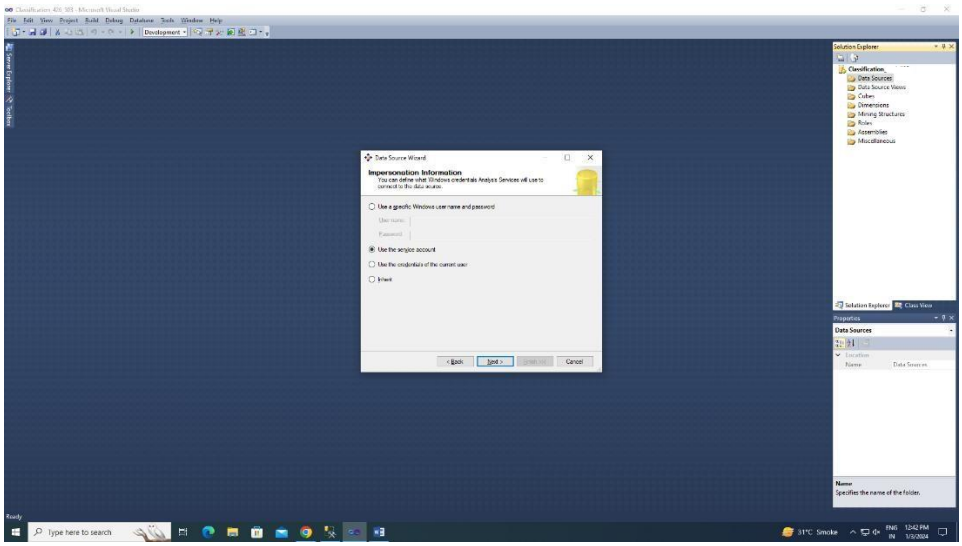

Quantity
7
6
5
4
3
2
1
0
Arial Washing Powder 1kg
Nirma Soap
Rice Grains 1kg
SunFlower Oil 1 ltr
Wheat Floor 1kg
Nirma Soap
Rice Grains 1kg
SunFlower Oil 1 ltr
Wheat Floor 1kg
Arial Washing Powder 1kg
Nirma Soap
Rice Grains 1kg
SunFlower Oil 1 ltr
Wheat Floor 1kg
1
2
3
Store ID
1
2
Customer ID
Product Name

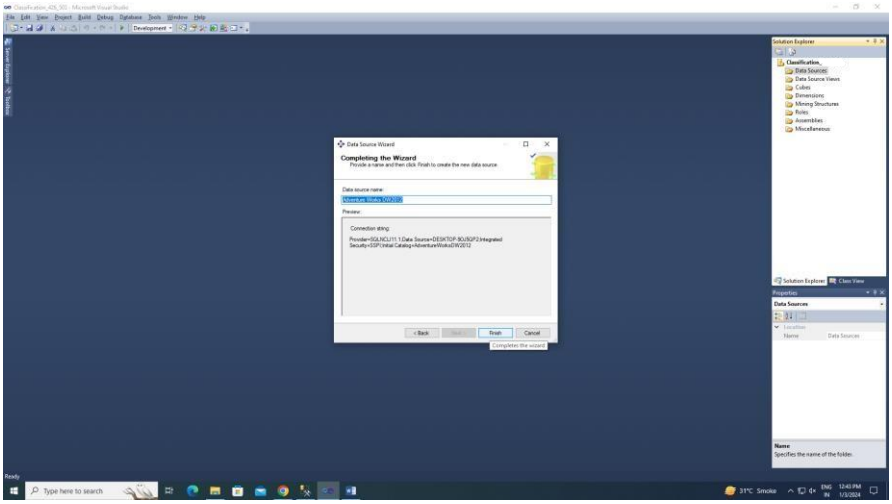
Practical 6

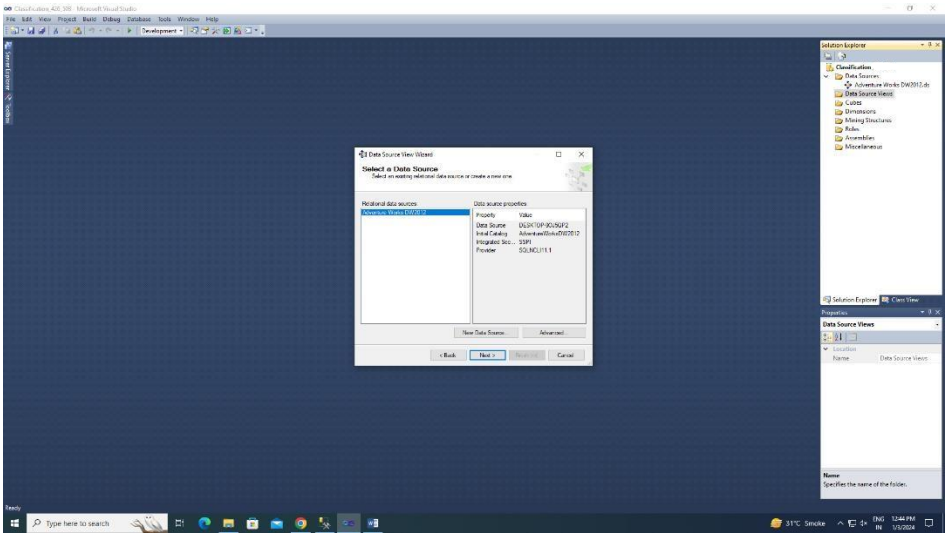
Shreyash phatak 470

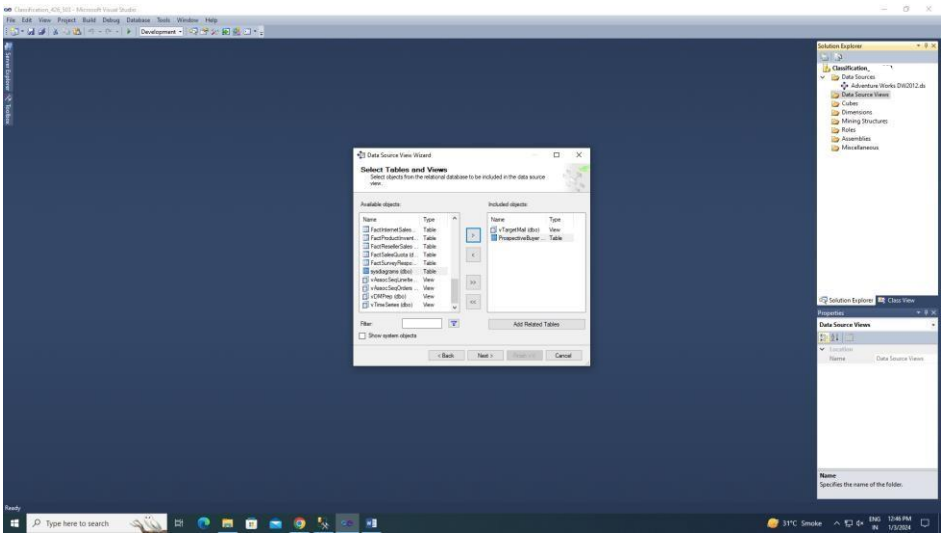


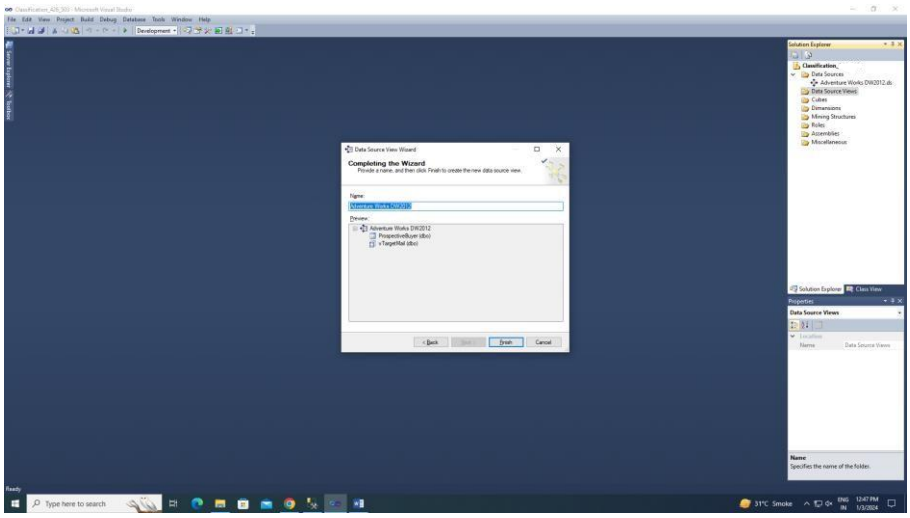



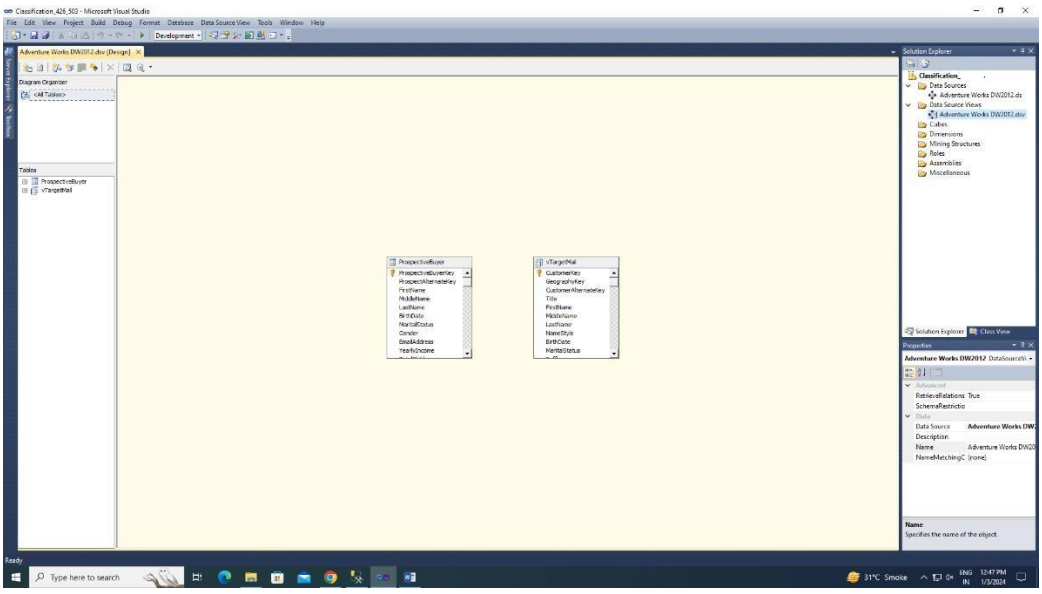

Data Source Wizard
Impersonation Information
Use a specific Windows user name and password
Use the service account
Use the credentials of the current user
Inherit
< Back
Next >
Cancel
Solution Explorer
Data Sources
Data Source Views
Cubes
Dimensions
Mining Structures
Roles
Assemblies
Miscellaneous
Properties
Name
Specifies the name of the folder.
Type here to search

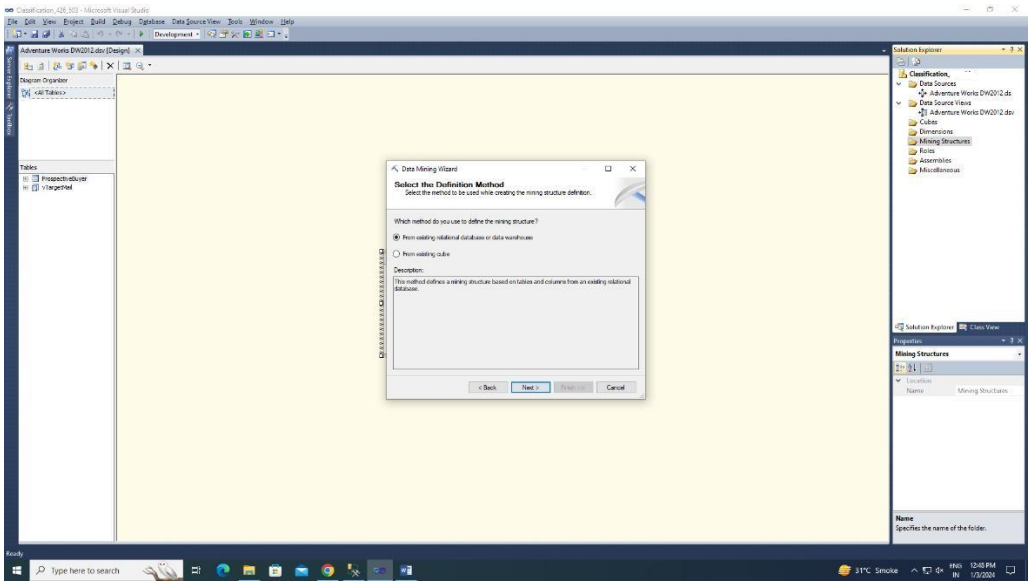

Data Source Wizard
Completing the Wizard
Data source name:
Preview:
Connection string:
< Back
Finish
Cancel
Solution Explorer
Data Sources
Name
Specifies the name of the folder.
Type here to search

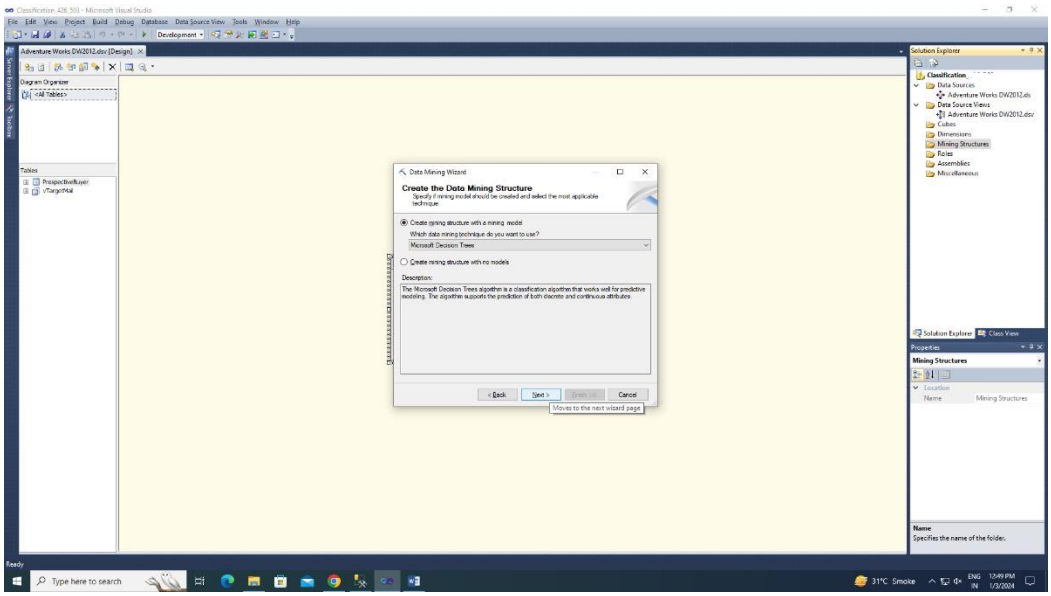

Data Source View Wizard
Select a Data Source
Relational data sources:
Data source properties:
Property
Value
New Data Source...
Advanced...
< Back
Next >
Cancel
Solution Explorer
Data Source Views
Name
Specifies the name of the folder.
Type here to search

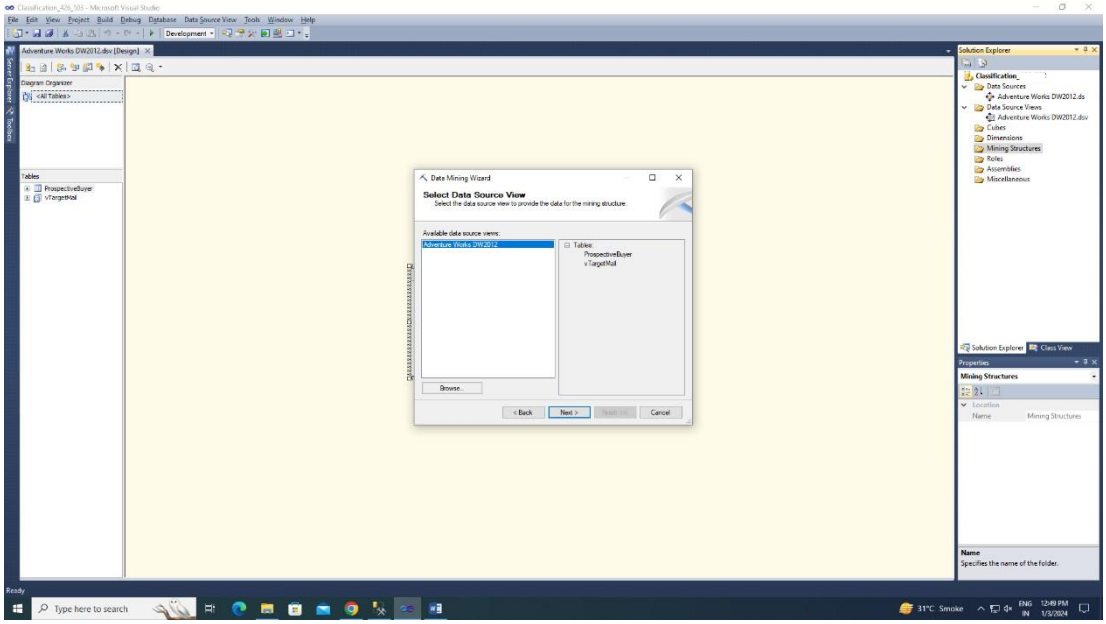

Data Source View Wizard
Select Tables and Views
Select objects from the relational database to be included in the data source view.
Available objects:
Included objects:
Add Related Tables
< Back
Next >
Cancel
Solution Explorer
Properties
Data Source Views
Name
Specifies the name of the folder.
Type here to search

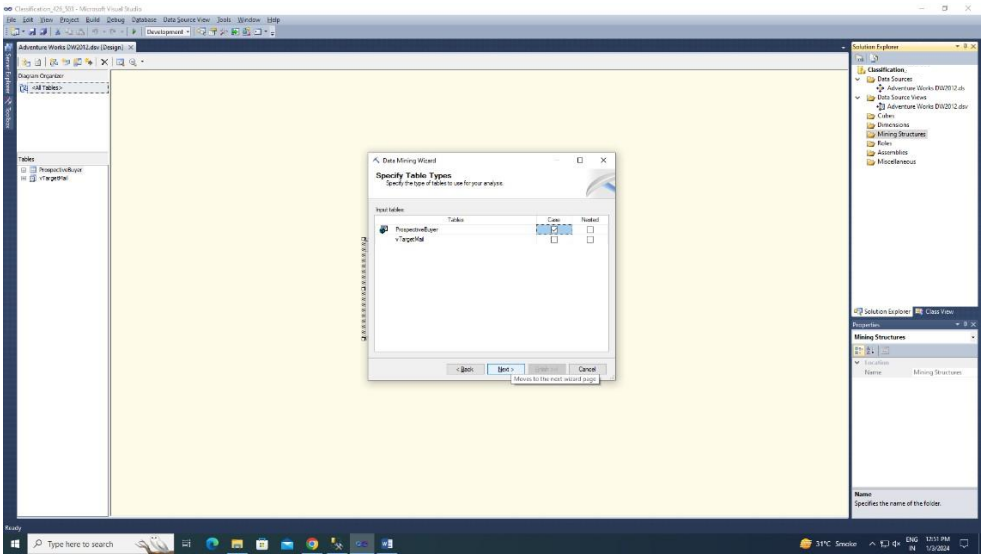

Data Source View Wizard
Completing the Wizard
Provide a name, and then click Finish to create the new data source view.
Name:
Preview:
Adventure Works DW2012
ProspectiveBuyer (dbo)
vTargetMail (dbo)
< Back
Finish
Cancel
Solution Explorer
Properties
Data Source Views
Name
Specifies the name of the folder.
Type here to search

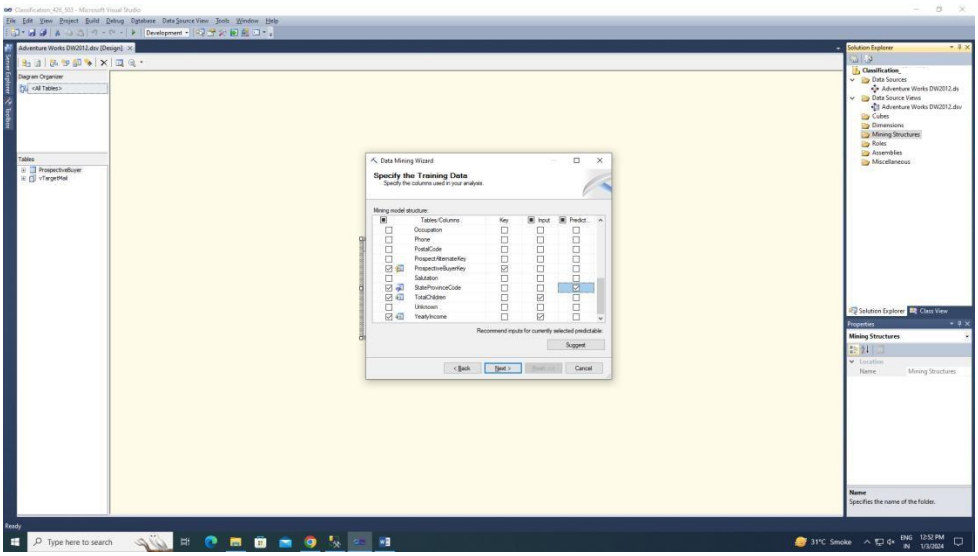

Classification_426_503 - Microsoft Visual Studio
Adventure Works DW2012.dsv [Design]
Diagram Organizer
<All Tables>
Tables
ProspectiveBuyer
vTargetMail
ProspectiveBuyer
ProspectiveBuyerKey
ProspectiveAlternateKey
FirstName
MiddleName
LastName
BirthDate
MaritalStatus
Gender
EmailAddress
YearlyIncome
vTargetMail
CustomerKey
GeographyKey
CustomerAlternateKey
Title
FirstName
MiddleName
LastName
NameStyle
BirthDate
MaritalStatus
Solution Explorer
Properties
Adventure Works DW2012 DataSourceVi
Name
Specifies the name of the object.
Ready
Type here to search

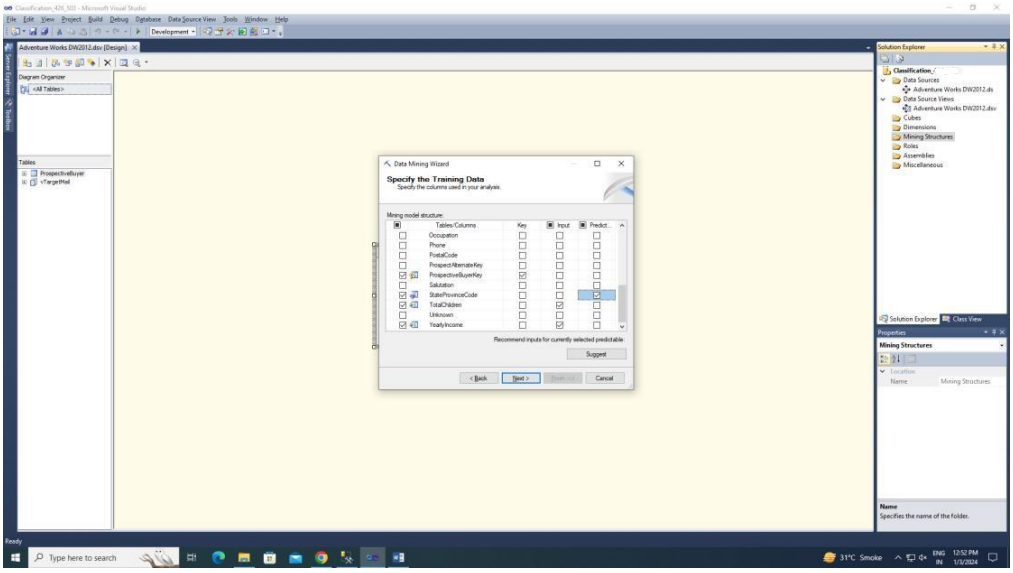

Data Mining Wizard
Select the Definition Method
Select the method to be used while creating the mining structure definition.
Which method do you use to define the mining structure?
From existing relational database or data warehouse
From existing cube
Description:
This method defines a mining structure based on tables and columns from an existing relational database.
< Back
Next >
Finish
Cancel
Solution Explorer
Class View
Properties
Mining Structures
Name
Specifies the name of the folder.
Type here to search
31°C Smoke
ENG
IN
12:48 PM
1/3/2024

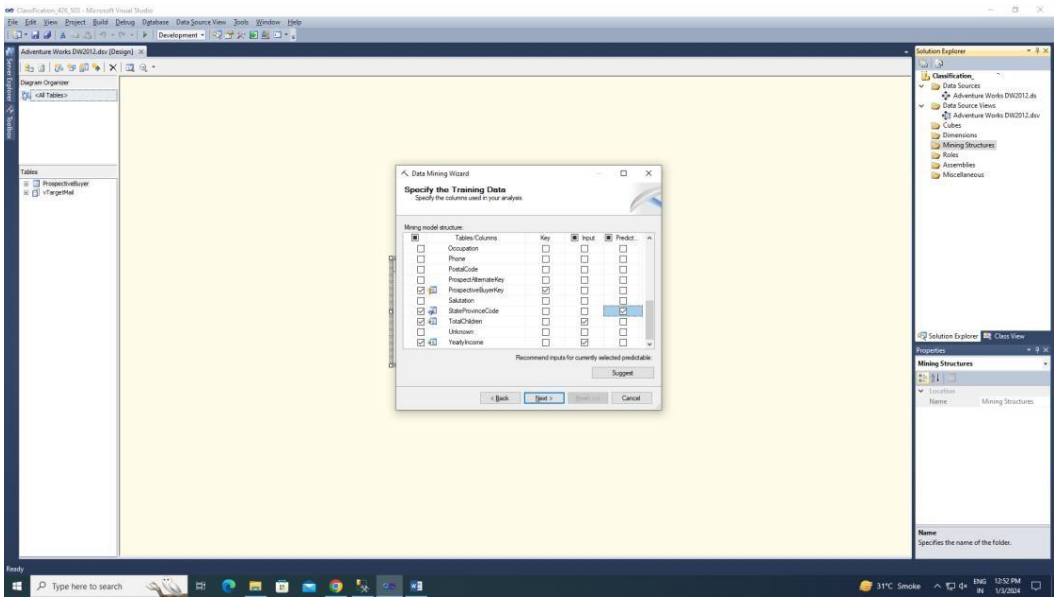

Data Mining Wizard
Create the Data Mining Structure
Specify if mining model should be created and select the most applicable technique.
Create mining structure with a mining model
Which data mining technique do you want to use?
Microsoft Decision Trees
Create mining structure with no models
Description:
The Microsoft Decision Trees algorithm is a classification algorithm that works well for predictive modeling. The algorithm supports the prediction of both discrete and continuous attributes.
< Back
Next >
Finish
Cancel
Moves to the next wizard page
Solution Explorer
Class View
Properties
Mining Structures
Name
Specifies the name of the folder.
Type here to search
31°C Smoke
ENG
IN
1:49 PM
1/3/2024

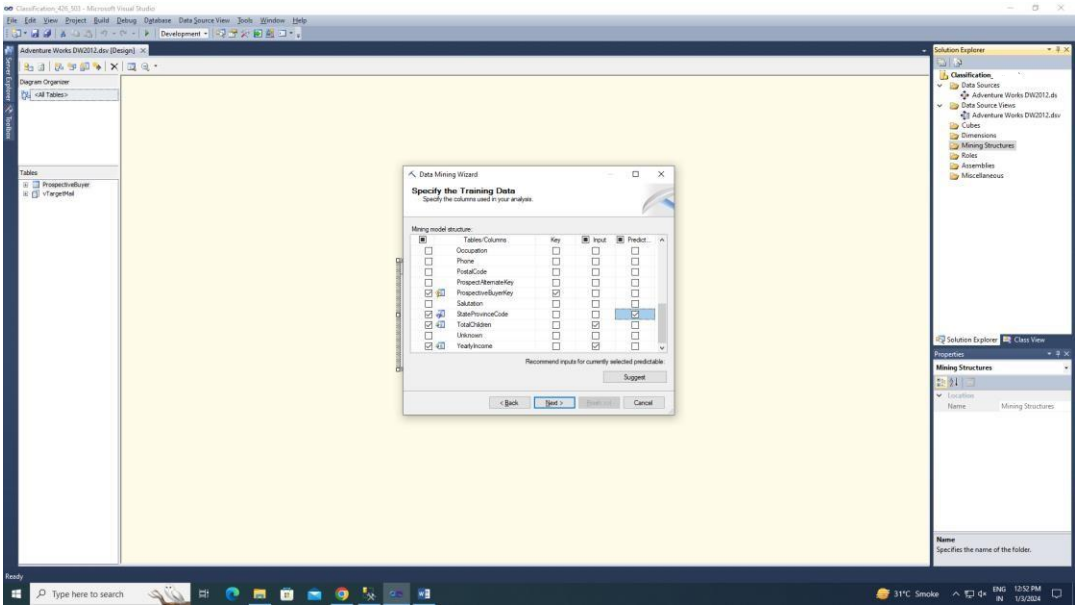

Data Mining Wizard
Select Data Source View
Select the data source view to provide the data for the mining structure.
Available data source views:
Adventure Works DW2012
Tables
ProspectiveBuyer
vTargetMail
Browse...
< Back
Next >
Cancel

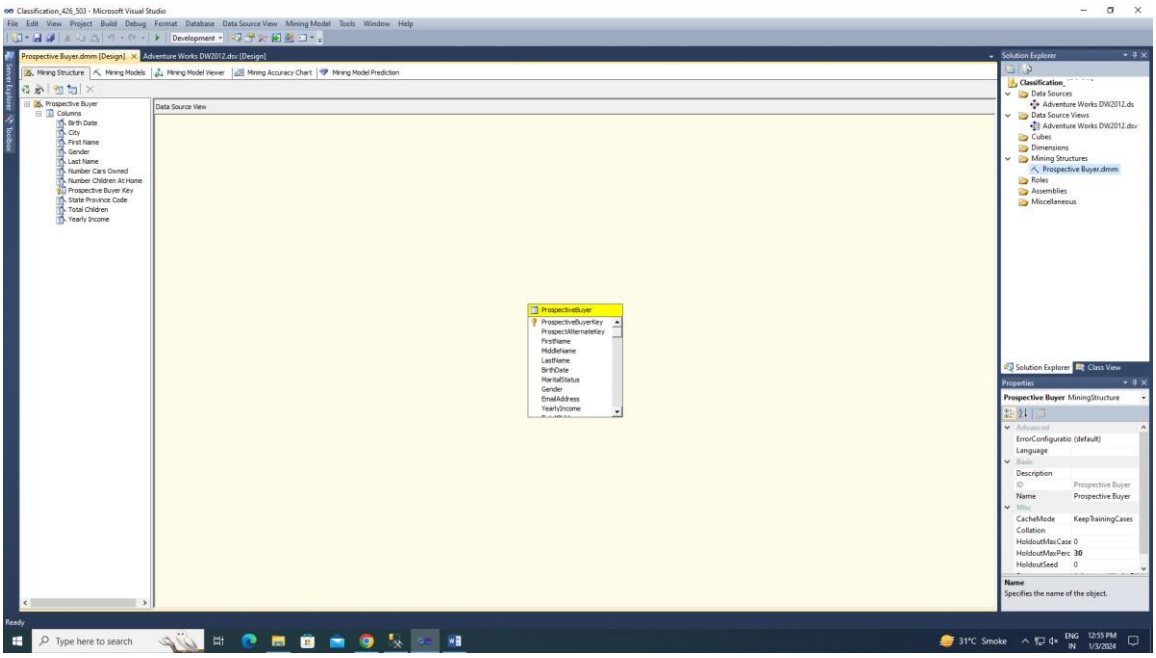

Data Mining Wizard
Specify Table Types
Specify the type of tables to use for your analysis.
Input tables:
Tables
Case
Nested
ProspectiveBuyer
vTargetMail
< Back
Next >
Cancel
Moves to the next wizard page


Data Mining Wizard
Specify the Training Data
Specify the columns used in your analysis.
Mining model structure:
Tables/Columns
Key
Input
Predict
Occupation
Phone
PostalCode
ProspectAlternateKey
ProspectiveBuyerKey
Salutation
StateProvinceCode
TotalChildren
Unknown
YearlyIncome
Recommend inputs for currently selected predictable:
Suggest
< Back
Next >
Finish >>
Cancel


Data Mining Wizard
Specify the Training Data
Specify the columns used in your analysis.
Mining model structure:
Tables/Columns
Key
Input
Predict
Occupation
Phone
PostalCode
ProspectAlternateKey
ProspectiveBuyerKey
Salutation
StateProvinceCode
TotalChildren
Unknown
YearlyIncome
Recommend inputs for currently selected predictable:
Suggest
< Back
Next >
Finish >>
Cancel


Data Mining Wizard
Specify the Training Data
Specify the columns used in your analysis.
Mining model structure:
Tables/Columns
Key
Input
Predict...
Occupation
Phone
PostalCode
ProspectAlternateKey
ProspectiveBuyerKey
Salutation
StateProvinceCode
TotalChildren
Unknown
YearlyIncome
Recommend inputs for currently selected predictable:
Suggest
< Back
Next >
Cancel
Solution Explorer
Class View
Properties
Mining Structures
Name
Specifies the name of the folder.
Ready
Type here to search
31°C Smoke
ENG
IN
12:52 PM
1/3/2024

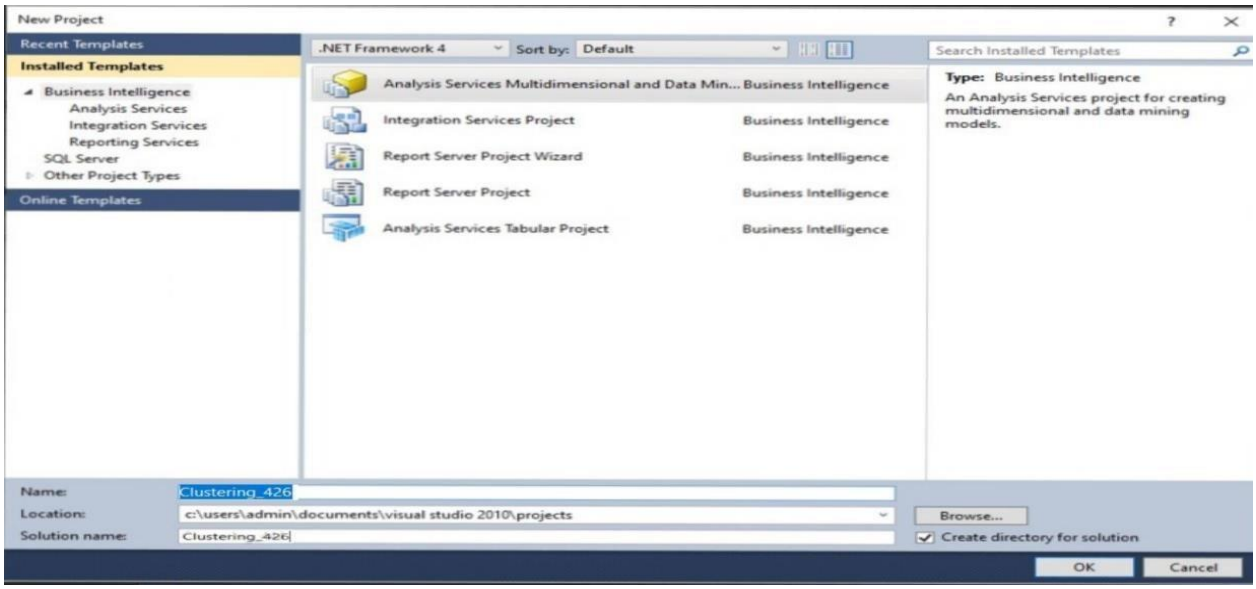

Data Mining Wizard
Specify the Training Data
Specify the columns used in your analysis.
Mining model structure:
Tables/Columns
Key
Input
Predict...
Occupation
Phone
PostalCode
ProspectAlternateKey
ProspectiveBuyerKey
Salutation
StateProvinceCode
TotalChildren
Unknown
YearlyIncome
Recommend inputs for currently selected predictable:
Suggest
< Back
Next >
Cancel
Solution Explorer
Class View
Properties
Mining Structures
Name
Specifies the name of the folder.
Ready
Type here to search
31°C Smoke
ENG
IN
12:52 PM
1/3/2024

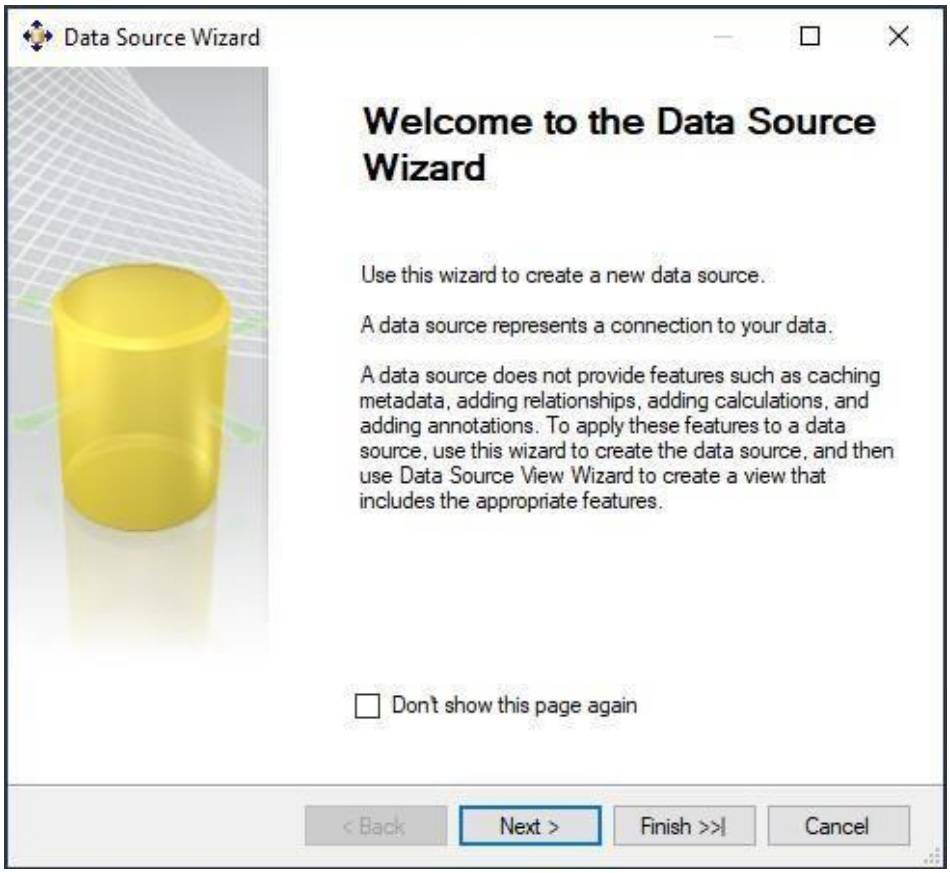

Classification_426_503 - Microsoft Visual Studio
File Edit View Project Build Debug Format Database Data Source View Mining Model Tools Window Help
Development
Prospective Buyer.dmm [Design]
Adventure Works DW2012.dsv [Design]
Mining Structure
Mining Models
Mining Model Viewer
Mining Accuracy Chart
Mining Model Prediction
Prospective Buyer
Columns
Birth Date
City
First Name
Gender
Last Name
Number Cars Owned
Number Children At Home
Prospective Buyer Key
State Province Code
Total Children
Yearly Income
Data Source View
ProspectiveBuyer
ProspectiveBuyerKey
ProspectAlternateKey
FirstName
MiddleName
LastName
BirthDate
MaritalStatus
Gender
EmailAddress
YearlyIncome
Solution Explorer
Classification_
Data Sources
Adventure Works DW2012.ds
Data Source Views
Adventure Works DW2012.dsv
Cubes
Dimensions
Mining Structures
Prospective Buyer.dmm
Roles
Assemblies
Miscellaneous
Solution Explorer
Class View
Properties
Prospective Buyer MiningStructure
ErrorConfiguratio (default)
Language
Description
ID Prospective Buyer
Name Prospective Buyer
CacheMode KeepTrainingCases
Collation
HoldoutMaxCase 0
HoldoutMaxPerc 30
HoldoutSeed 0
Name
Specifies the name of the object.
Ready
Type here to search
31°C Smoke
ENG
IN
12:55 PM
1/3/2024

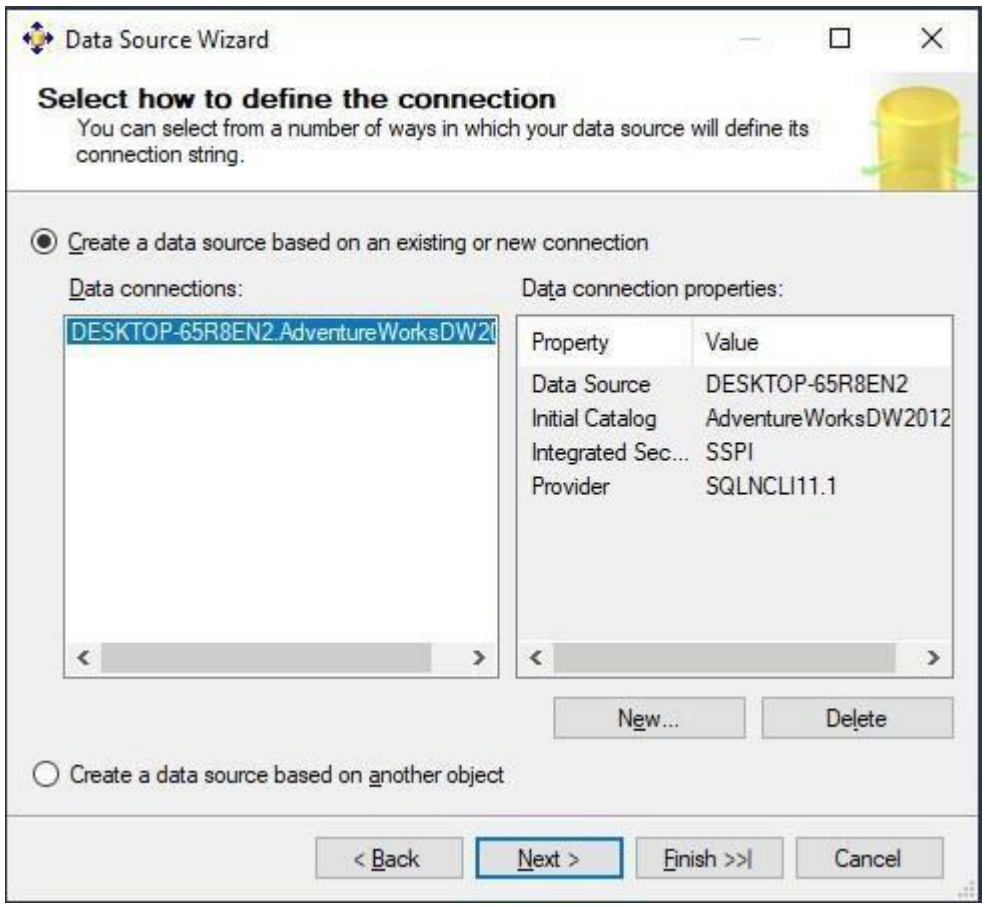
# BI practical-8

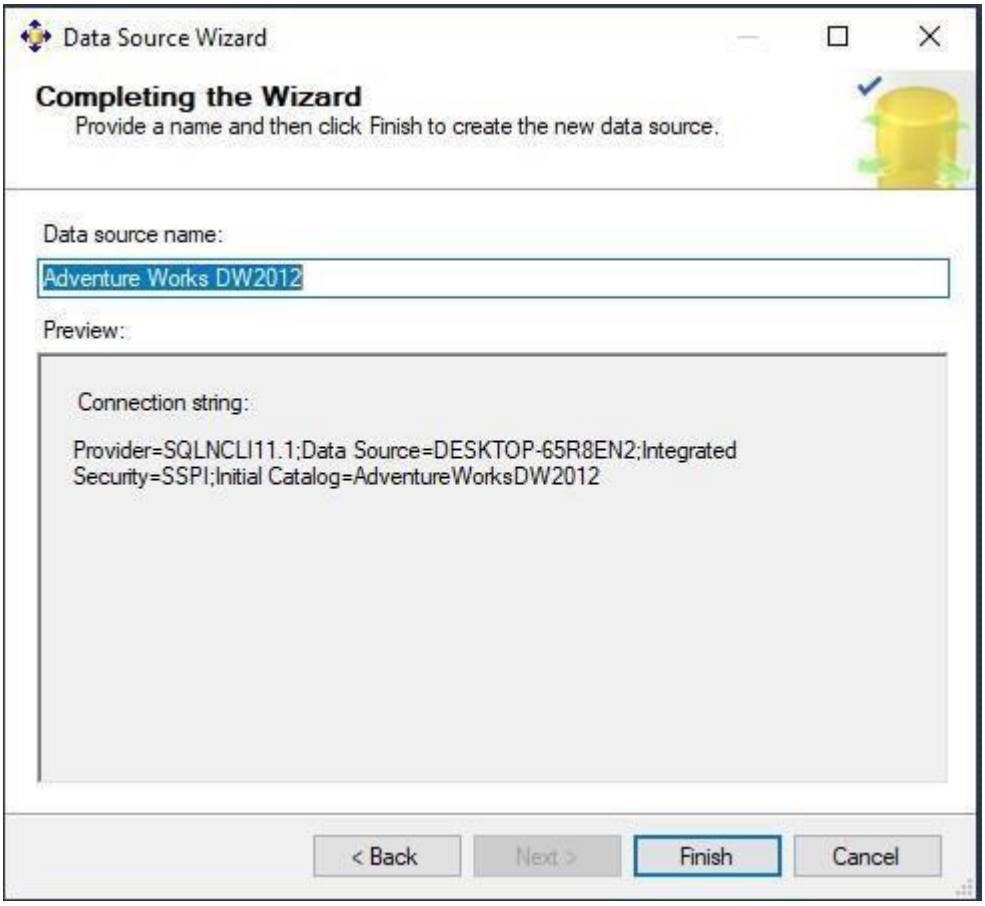
Shreyash Phatak 470

Q. Perform the data clustering using clustering algorithm

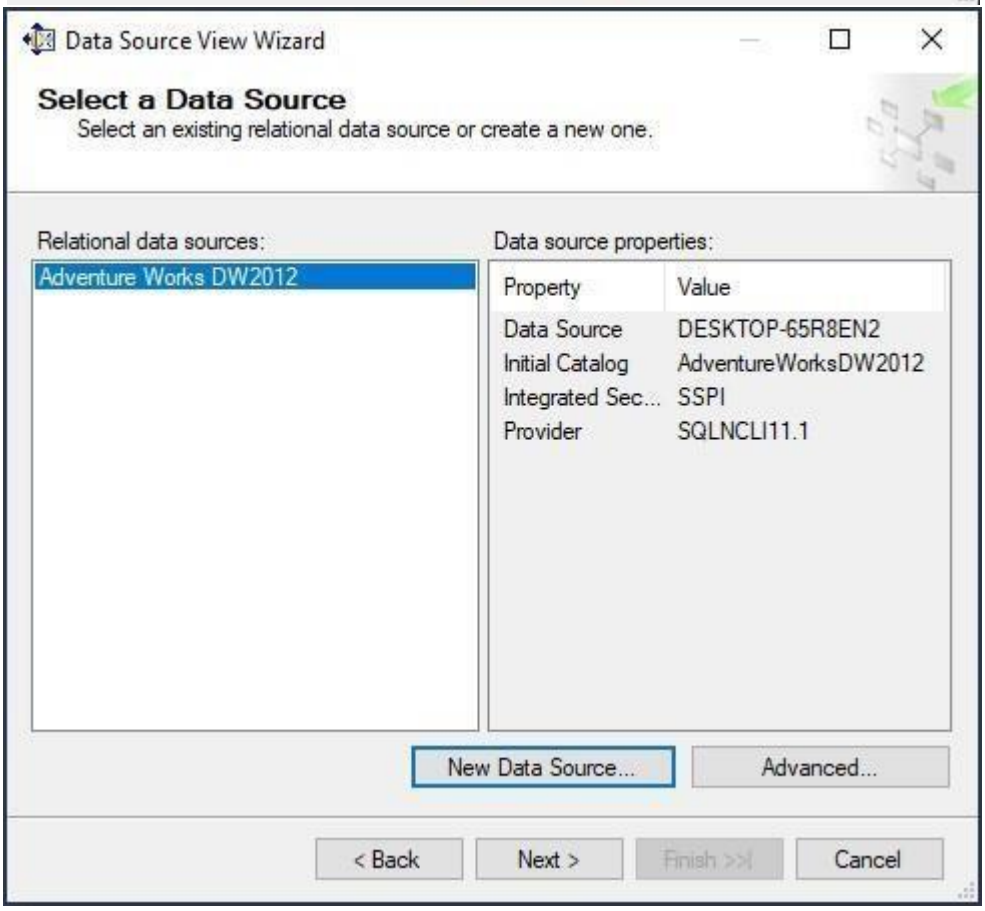


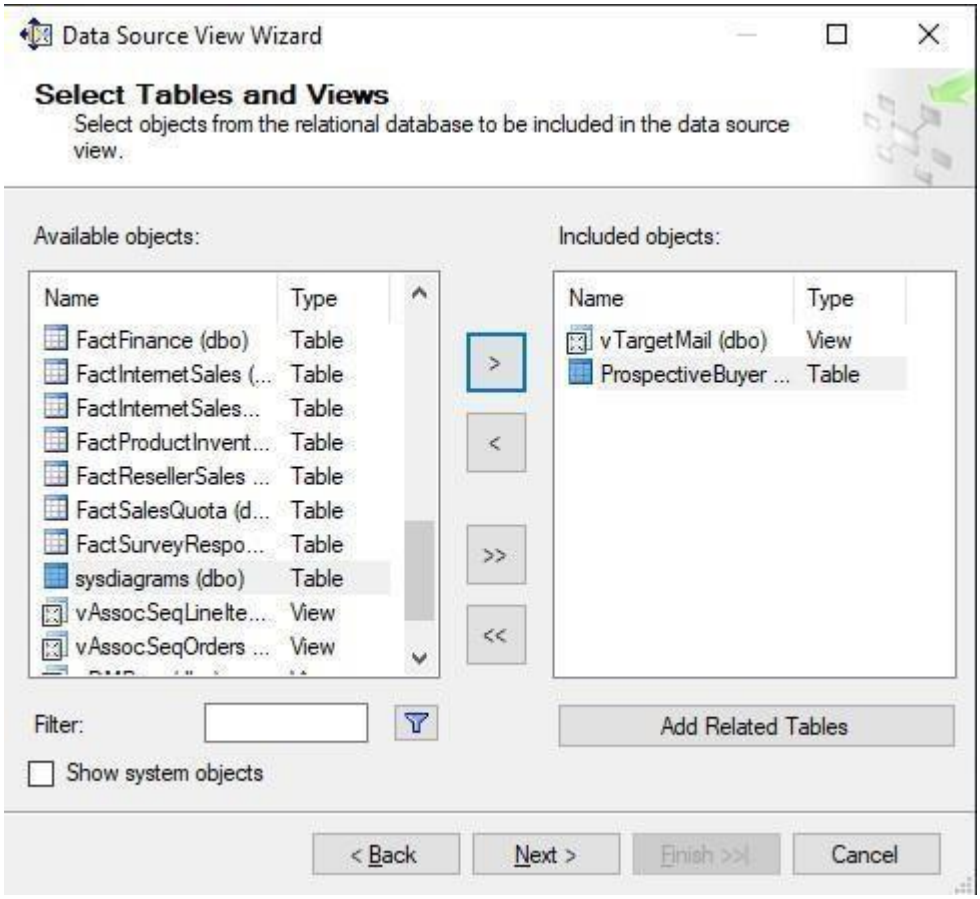



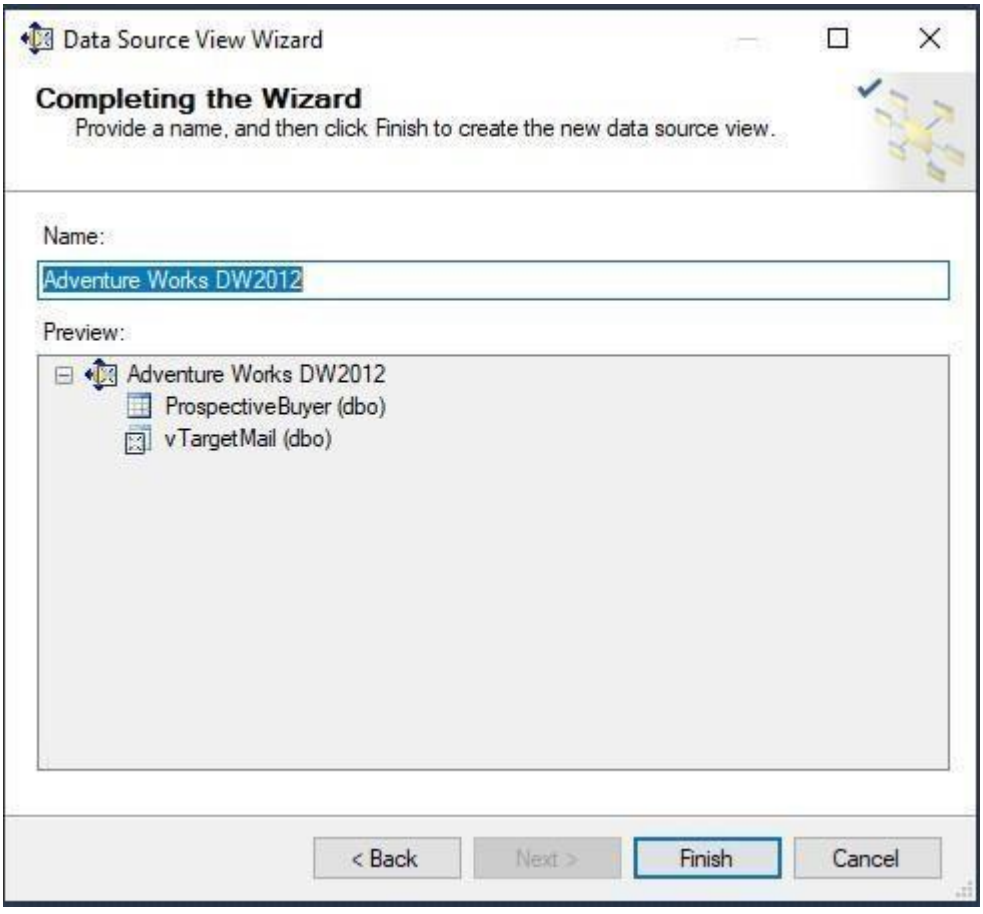

Data Source Wizard
Select how to define the connection
You can select from a number of ways in which your data source will define its connection string.
Create a data source based on an existing or new connection
Data connections:
DESKTOP-65R8EN2.AdventureWorksDW2(
Data connection properties:
Property
Value
Data Source
DESKTOP-65R8EN2
Initial Catalog
AdventureWorksDW2012
Integrated Sec...
SSPI
Provider
SQLNCLI11.1
New...
Delete
Create a data source based on another object
< Back
Next >
Finish >>|
Cancel

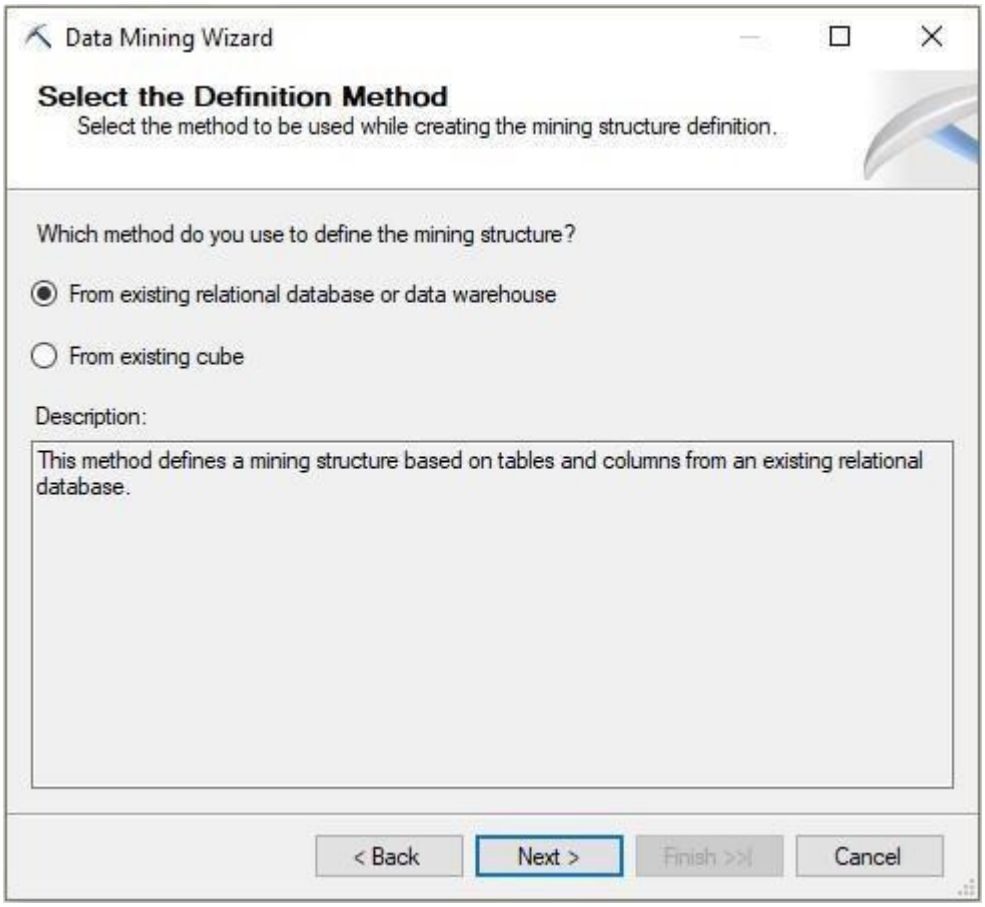

Data Source Wizard
Completing the Wizard
Provide a name and then click Finish to create the new data source.
Data source name:
Adventure Works DW2012
Preview:
Connection string:
Provider=SQLNCLI11.1;Data Source=DESKTOP-65R8EN2;Integrated Security=SSPI;Initial Catalog=AdventureWorksDW2012
< Back
Next >
Finish
Cancel

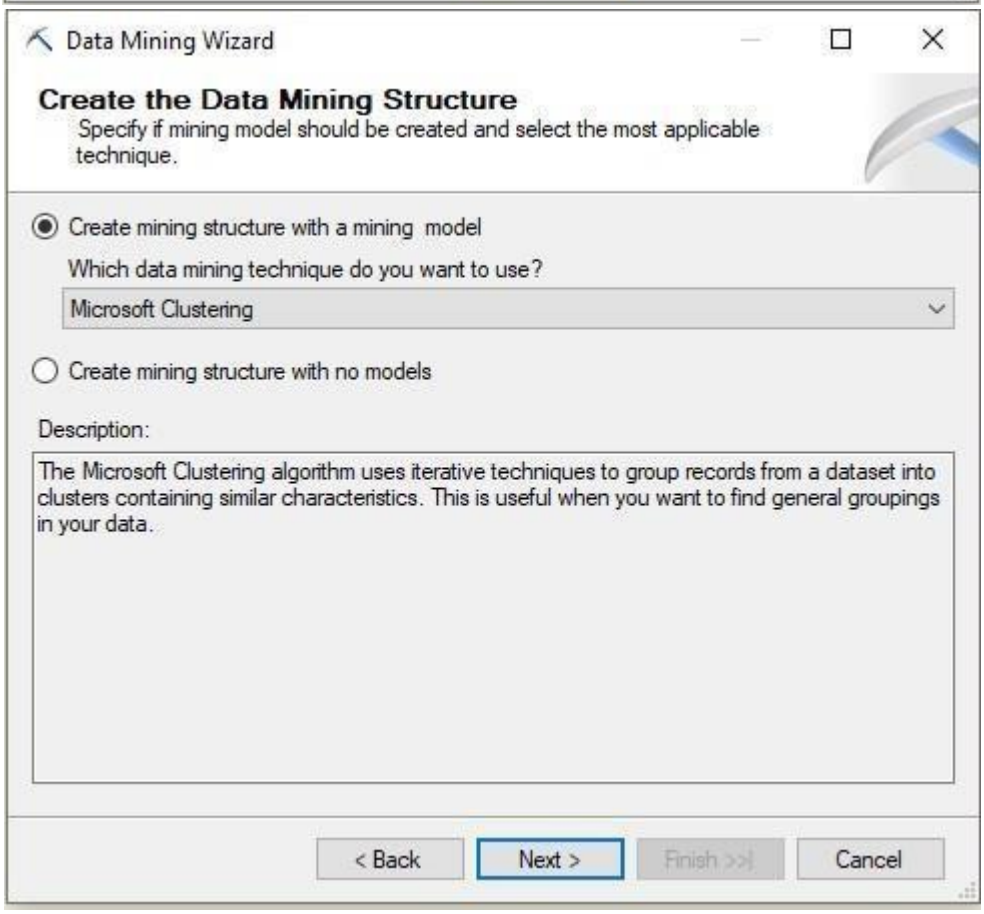

Data Source View Wizard
Welcome to the Data Source View Wizard
Use this wizard to create a new data source view.
You create a data source view from tables and views in a relational database.
A data source provides a simple connection to a relational database. Use a data source view for more advanced features, such as caching metadata, adding relationships, creating calculations, and setting logical keys.
Don't show this page again
< Back
Next >
Finish >>|
Cancel

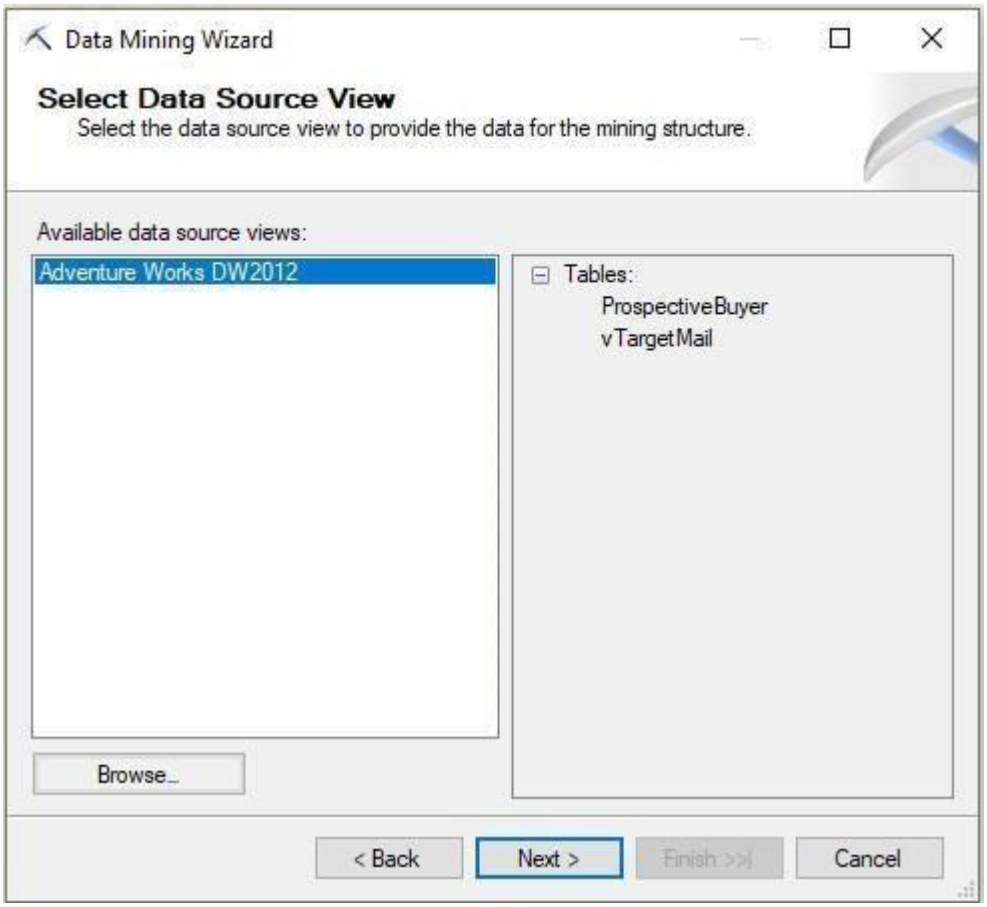

Data Source View Wizard
Select a Data Source
Select an existing relational data source or create a new one.
Relational data sources:
Adventure Works DW2012
Data source properties:
Property
Value
Data Source
DESKTOP-65R8EN2
Initial Catalog
AdventureWorksDW2012
Integrated Sec...
SSPI
Provider
SQLNCLI11.1
New Data Source...
Advanced...
< Back
Next >
Finish >>|
Cancel

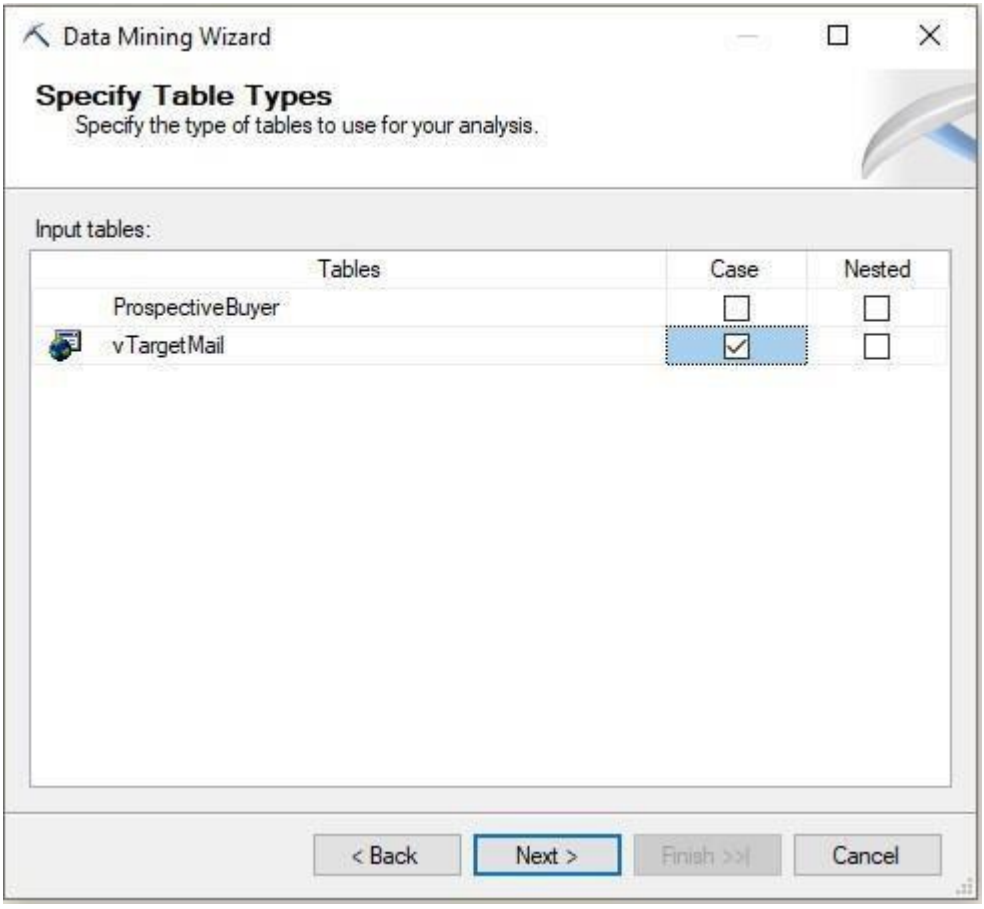

Data Source View Wizard
Select Tables and Views
Select objects from the relational database to be included in the data source view.
Available objects:
Name
Type
FactFinance (dbo)
Table
FactInternetSales (...
Table
FactInternetSales...
Table
FactProductInvent...
Table
FactResellerSales ...
Table
FactSalesQuota (d...
Table
FactSurveyRespo...
Table
sysdiagrams (dbo)
Table
vAssocSeqLineIte...
View
vAssocSeqOrders ...
View
>
<
>>
<<
Included objects:
Name
Type
vTargetMail (dbo)
View
ProspectiveBuyer ...
Table
Filter:
Add Related Tables
Show system objects
< Back
Next >
Finish >>|
Cancel

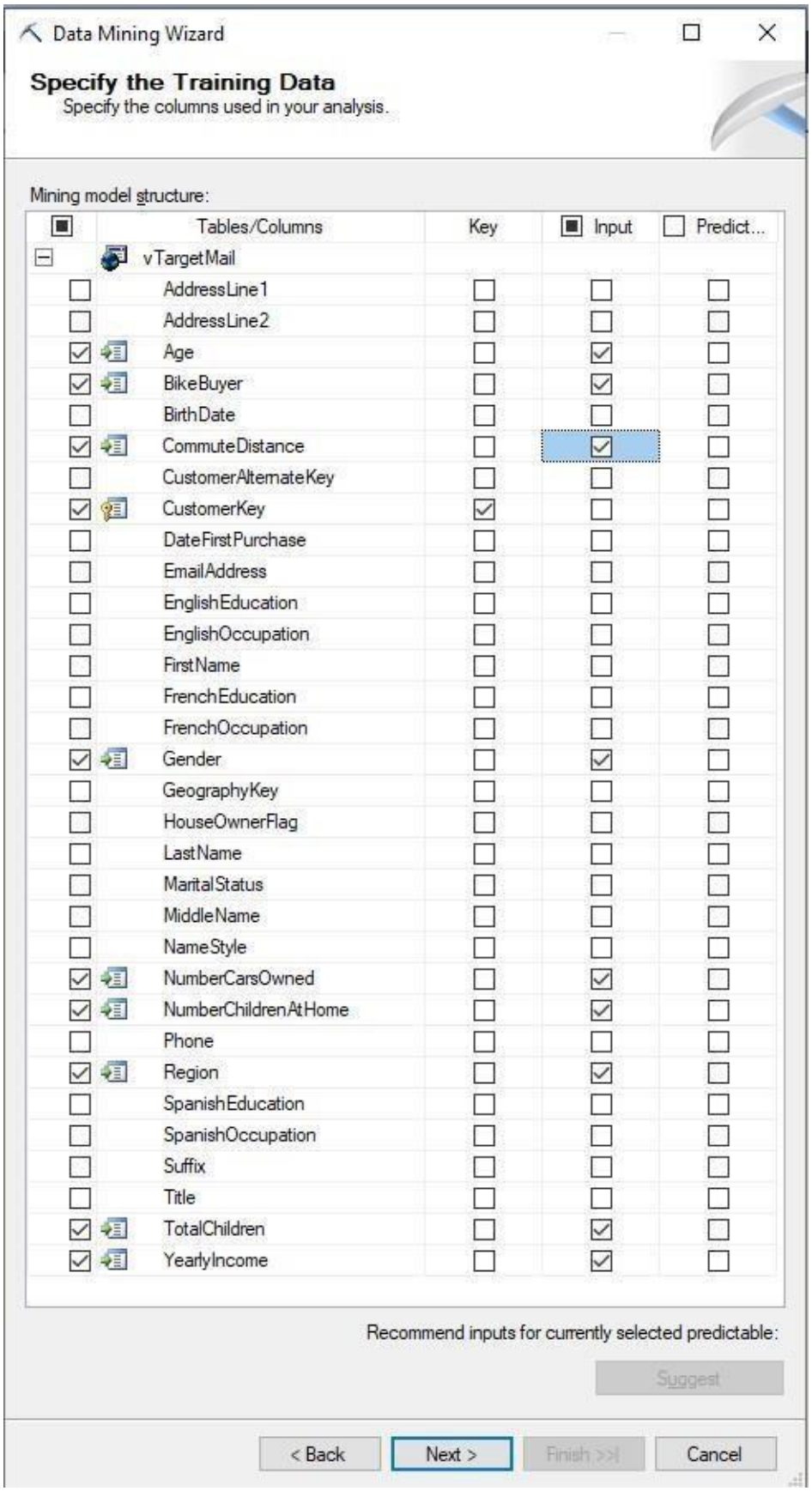

Data Source View Wizard
Completing the Wizard
Provide a name, and then click Finish to create the new data source view.
Name:
Adventure Works DW2012
Preview:
Adventure Works DW2012
ProspectiveBuyer (dbo)
vTargetMail (dbo)
< Back
Next >
Finish
Cancel

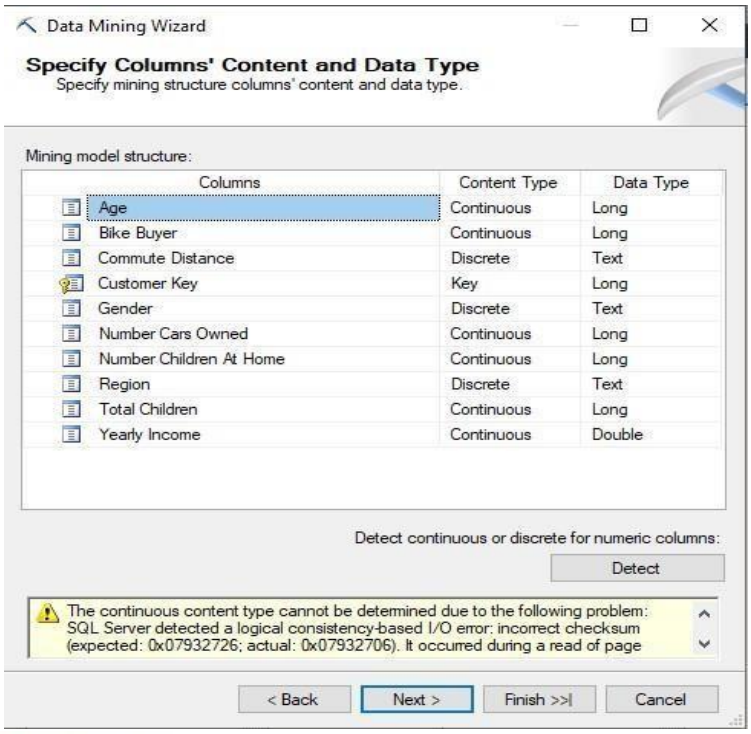

Data Mining Wizard
Select the Definition Method
Select the method to be used while creating the mining structure definition.
Which method do you use to define the mining structure?
From existing relational database or data warehouse
From existing cube
Description:
This method defines a mining structure based on tables and columns from an existing relational database.
< Back
Next >
Finish >>|
Cancel

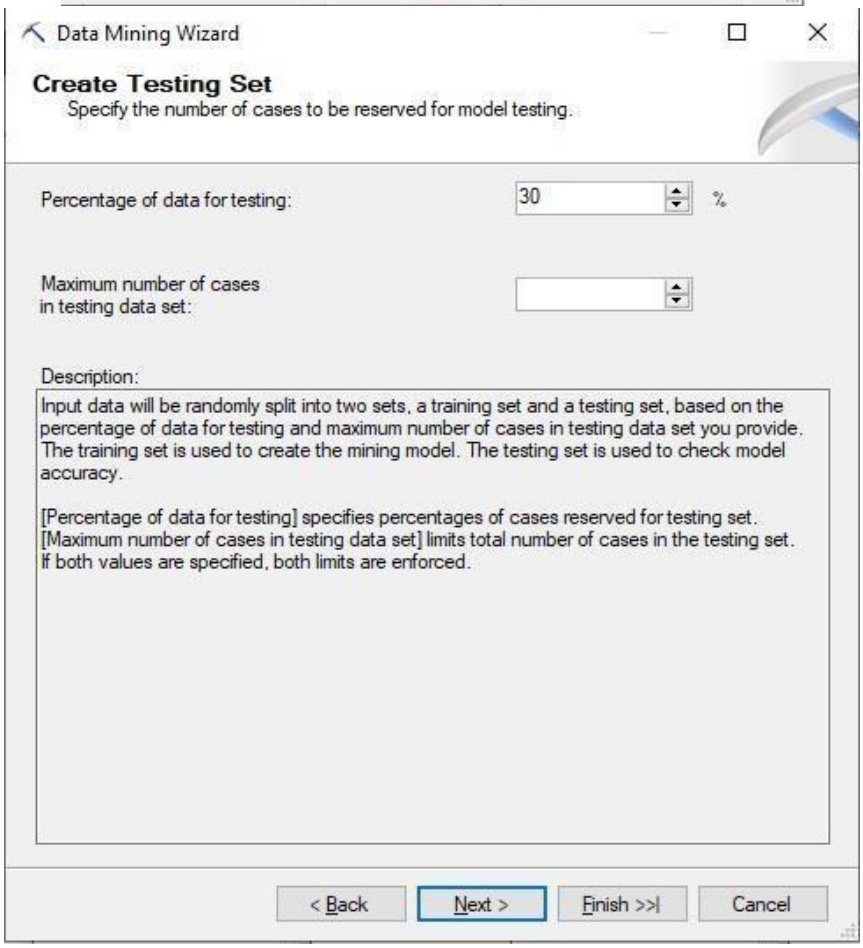

Data Mining Wizard
Create the Data Mining Structure
Specify if mining model should be created and select the most applicable technique.
Create mining structure with a mining model
Which data mining technique do you want to use?
Microsoft Clustering
Create mining structure with no models
Description:
The Microsoft Clustering algorithm uses iterative techniques to group records from a dataset into clusters containing similar characteristics. This is useful when you want to find general groupings in your data.
< Back
Next >
Finish >>|
Cancel

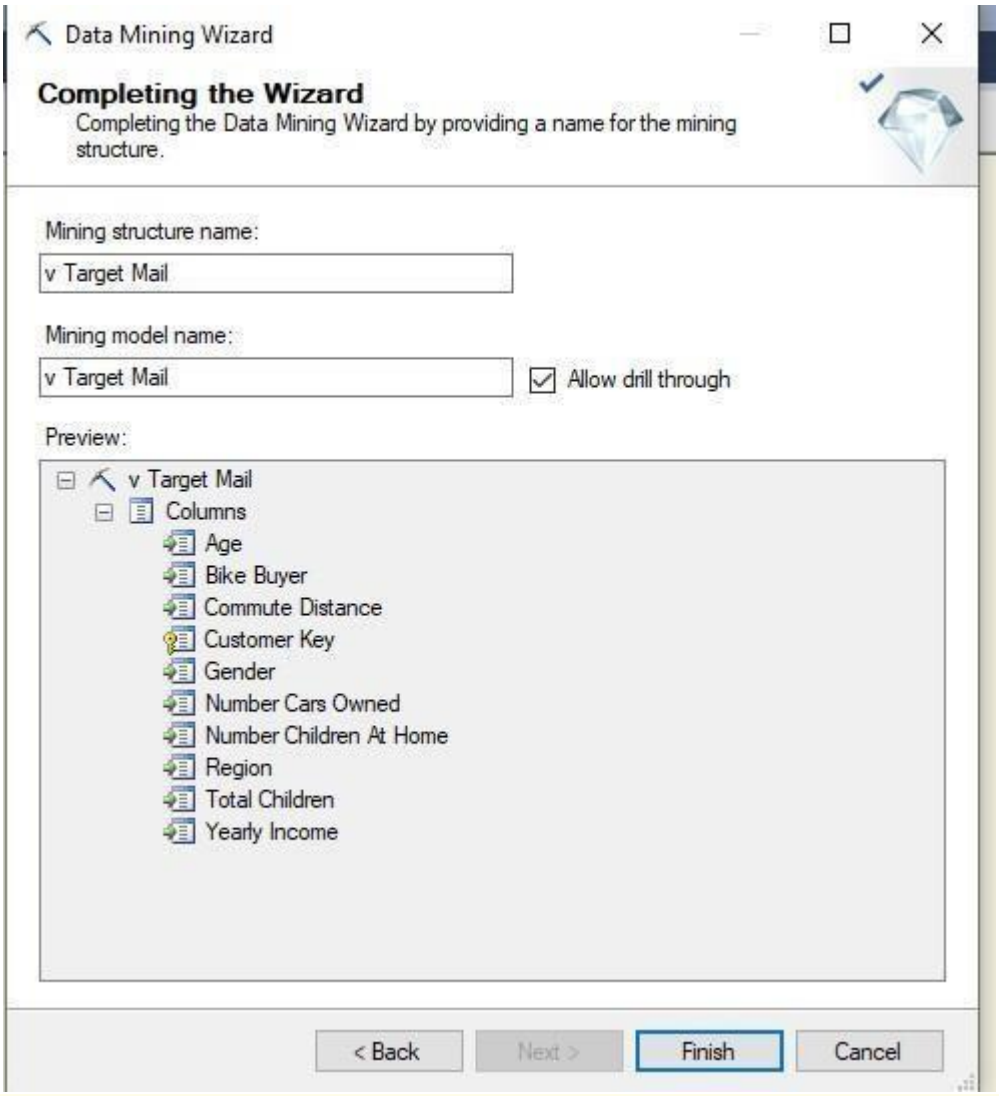

Data Mining Wizard
Select Data Source View
Select the data source view to provide the data for the mining structure.
Available data source views:
Adventure Works DW2012
Tables:
ProspectiveBuyer
vTargetMail
Browse...
< Back
Next >
Finish >>|
Cancel

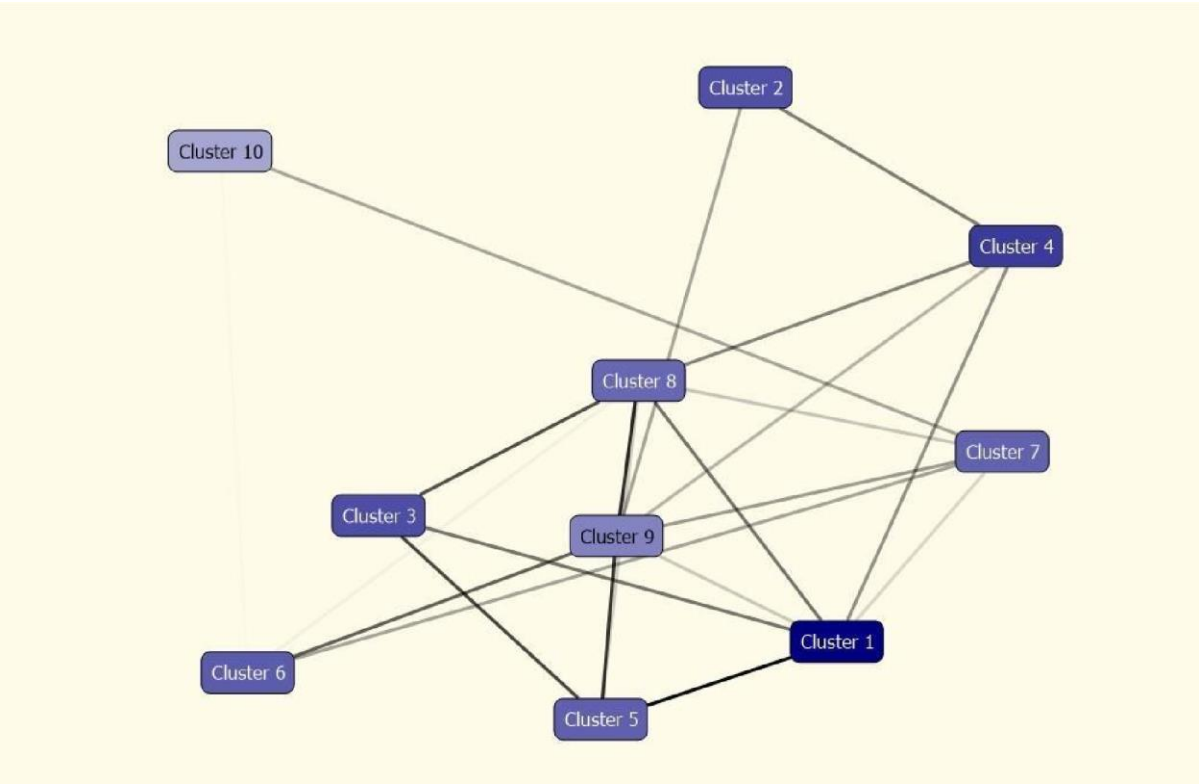

Data Mining Wizard
Specify Table Types
Specify the type of tables to use for your analysis.
Input tables:
Tables
Case
Nested
ProspectiveBuyer
vTargetMail
< Back
Next >
Finish >>|
Cancel


Data Mining Wizard
Specify the Training Data
Specify the columns used in your analysis.
Mining model structure:
Tables/Columns
Key
Input
Predict...
vTargetMail
AddressLine1
AddressLine2
Age
BikeBuyer
BirthDate
CommuteDistance
CustomerAlternateKey
CustomerKey
DateFirstPurchase
EmailAddress
EnglishEducation
EnglishOccupation
FirstName
FrenchEducation
FrenchOccupation
Gender
GeographyKey
HouseOwnerFlag
LastName
MaritalStatus
MiddleName
NameStyle
NumberCarsOwned
NumberChildrenAtHome
Phone
Region
SpanishEducation
SpanishOccupation
Suffix
Title
TotalChildren
YearlyIncome
Recommend inputs for currently selected predictable:
Suggest
< Back
Next >
Finish >>|
Cancel


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
Continuous
Long
Commute Distance
Discrete
Text
Customer Key
Key
Long
Gender
Discrete
Text
Number Cars Owned
Continuous
Long
Number Children At Home
Continuous
Long
Region
Discrete
Text
Total Children
Continuous
Long
Yearly Income
Continuous
Double
Detect continuous or discrete for numeric columns:
Detect
The continuous content type cannot be determined due to the following problem:
SQL Server detected a logical consistency-based I/O error: incorrect checksum
(expected: 0x07932726; actual: 0x07932706). It occurred during a read of page
< Back
Next >
Finish >>|
Cancel

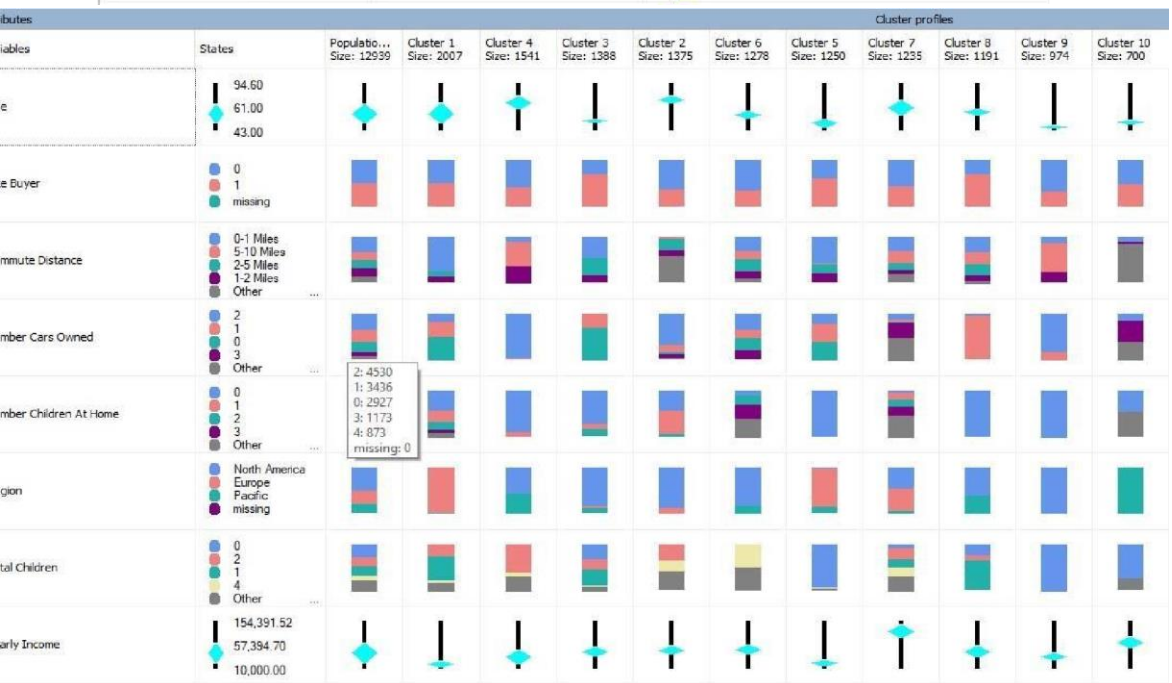

Data Mining Wizard
Create Testing Set
Specify the number of cases to be reserved for model testing.
Percentage of data for testing:
30
%
Maximum number of cases
in testing data set:
Description:
Input data will be randomly split into two sets, a training set and a testing set, based on the percentage 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


Data Mining Wizard
Completing the Wizard
Completing the Data Mining Wizard by providing a name for the mining structure.
Mining structure name:
v Target Mail
Mining model name:
v Target Mail
Allow drill through
Preview:
v Target Mail
Columns
Age
Bike Buyer
Commute Distance
Customer Key
Gender
Number Cars Owned
Number Children At Home
Region
Total Children
Yearly Income
< Back
Next >
Finish
Cancel


Cluster 2
Cluster 10
Cluster 4
Cluster 8
Cluster 7
Cluster 3
Cluster 9
Cluster 1
Cluster 6
Cluster 5

Characteristics for Population (All)

| Variables | Values | Probability |
|---|---|---|
| Number Children At Home | 0 | |
| Region | North America | |
| Bike Buyer | 0 | |
| Bike Buyer | 1 | |
| Number Cars Owned | 2 | |
| Commute Distance | 0-1 Miles | |
| Region | Europe | |
| Total Children | 0 | |
| Number Cars Owned | 1 | |
| Age | 62 - 69 | |
| Yearly Income | 35,586.9 - 57,394.7 | |
| Yearly Income | 57,394.7 - 79,202.5 | |
| Age | 54 - 61 | |
| Yearly Income | 79,202.5 - 154,391.5 | |
| Age | 70 - 95 | |
| Number Cars Owned | 0 | |
| Total Children | 2 | |
| Age | 43 - 53 | |
| Total Children | 1 | |
| Region | Pacific | |
| Yearly Income | 10,000.0 - 35,586.9 | |
| Commute Distance | 5-10 Miles | |
| Commute Distance | 2-5 Miles | |
| Commute Distance | 1-2 Miles | |
| Number Children At Home | 1 | |
| Commute Distance | 10+ Miles | |
| Total Children | 4 | |
| Total Children | 3 | |
| Number Cars Owned | 3 | |
| Number Children At Home | 2 | |
| Total Children | 5 | |
| Number Cars Owned | 4 | |
| Number Children At Home | 3 | |
| Number Children At Home | 4 | |
| Number Children At Home | 5 | |



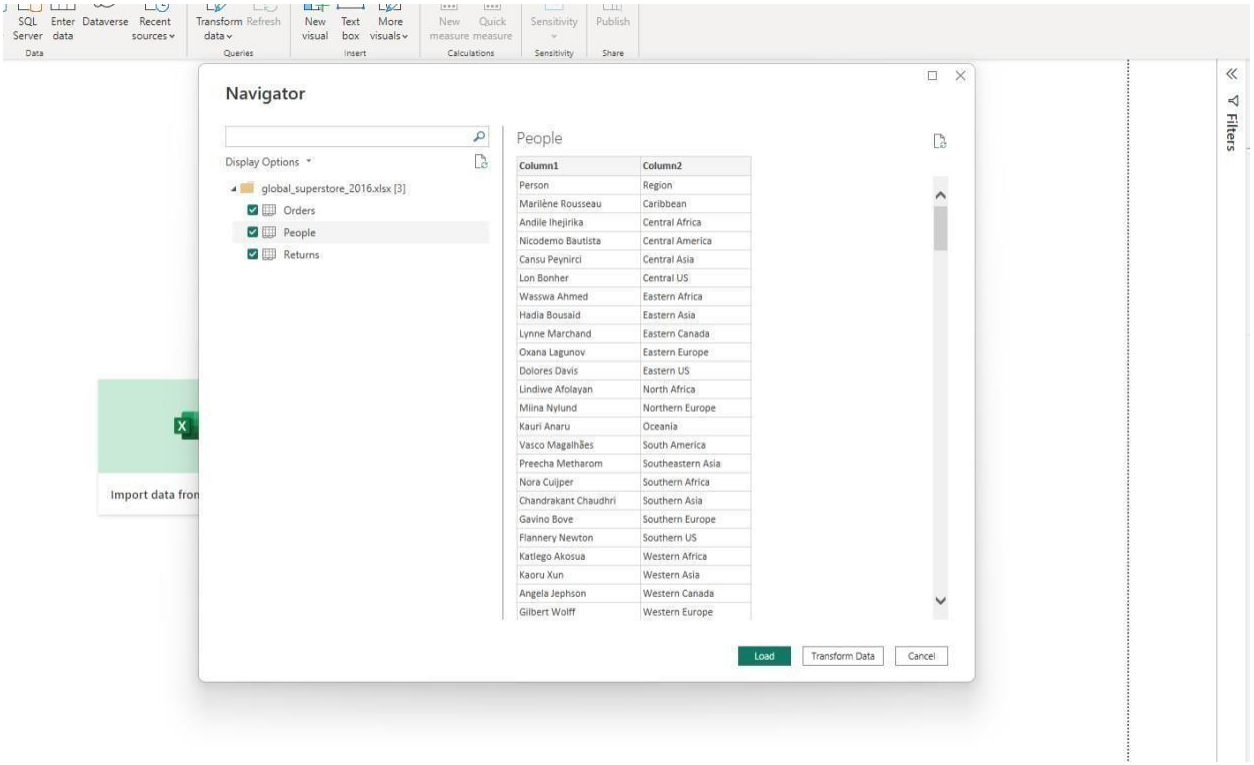
imination scores for Cluster 1 and Cluster 2

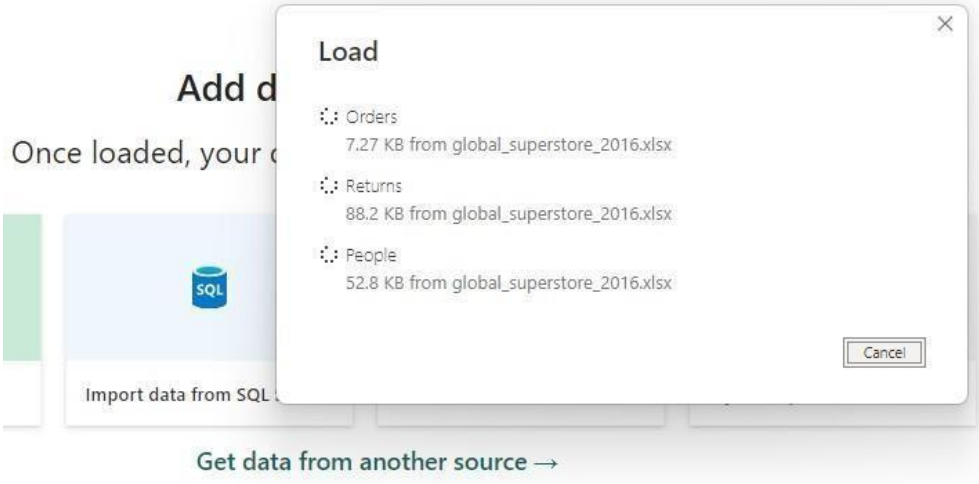
| ables | Values | Favors Cluster 1 | Favors Cluster 2 |
|---|---|---|---|
| rly Income | 10,000.0 - 43,249.4 | | |
| rly Income | 43,249.4 - 170,000.0 | | |
| ion | North America | | |
| ion | Europe | | |
| mute Distance | 0-1 Miles | | |
| mute Distance | 10+ Miles | | |
| | 70 - 87 | | |
| | 43 - 69 | | |
| al Children | 1 | | |
| ber Cars Owned | 0 | | |
| ber Cars Owned | 2 | | |
| al Children | 5 | | |
| al Children | 4 | | |
| ber Children At Home | 1 | | |
| ber Children At Home | 3 | | |
| ber Cars Owned | 3 | | |
| ber Cars Owned | 1 | | |
| ber Children At Home | 2 | | |
| mute Distance | 5-10 Miles | | |
| ber Children At Home | 4 | | |
| mute Distance | 2-5 Miles | | |

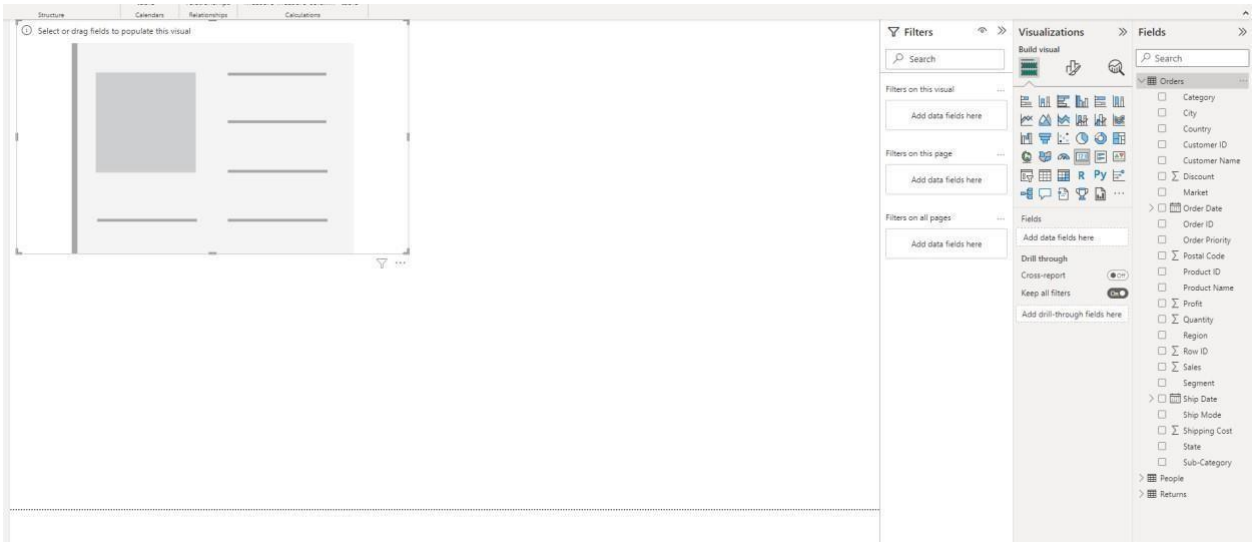
Practical 9

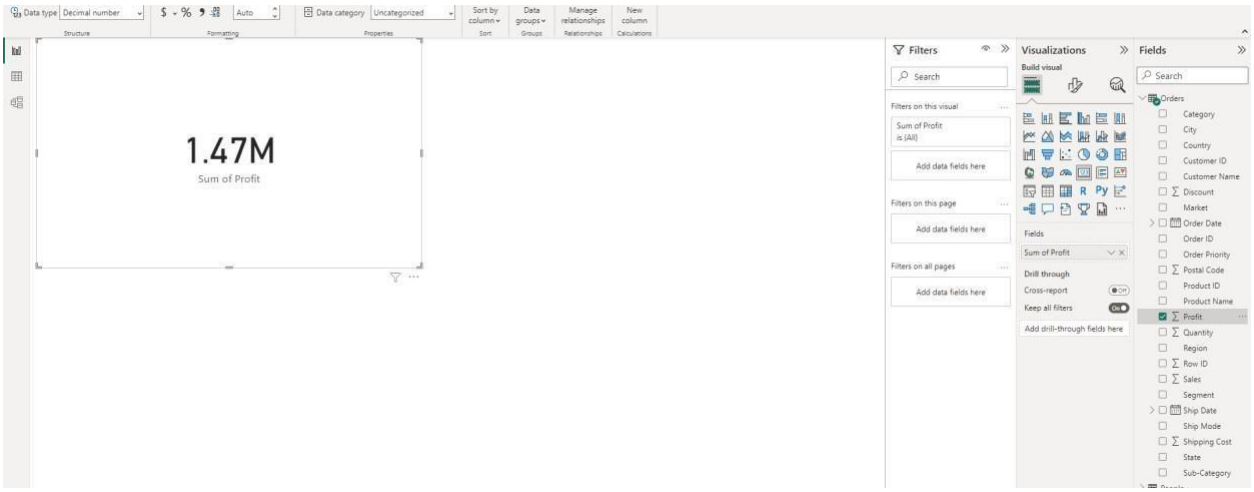
Shreyash Phatak 470

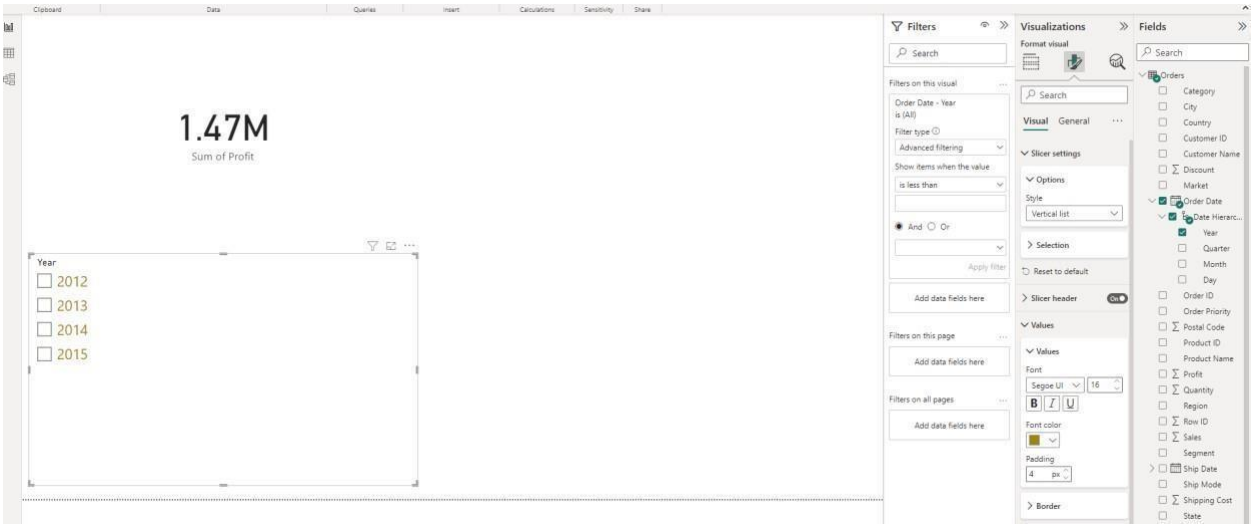
Q. Data visualisation using power Bi

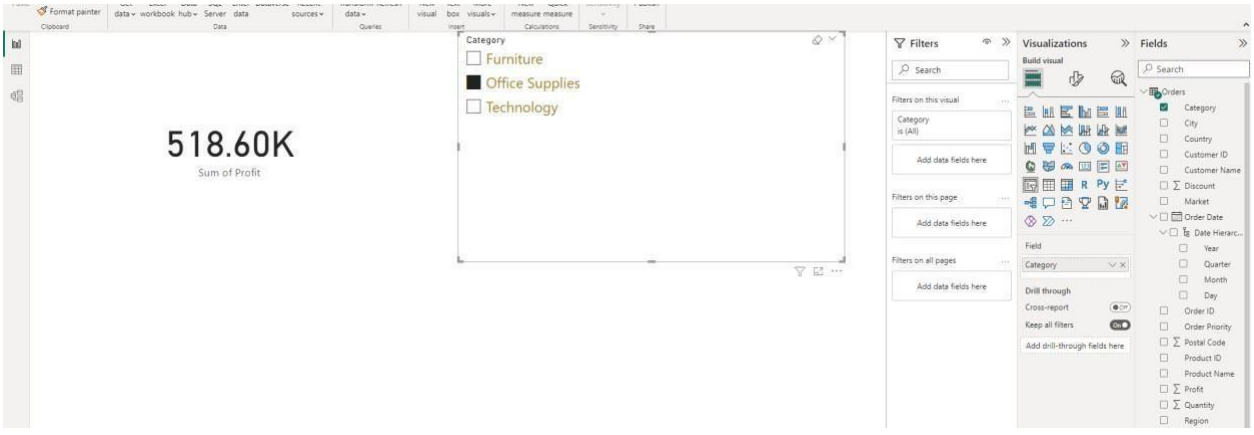


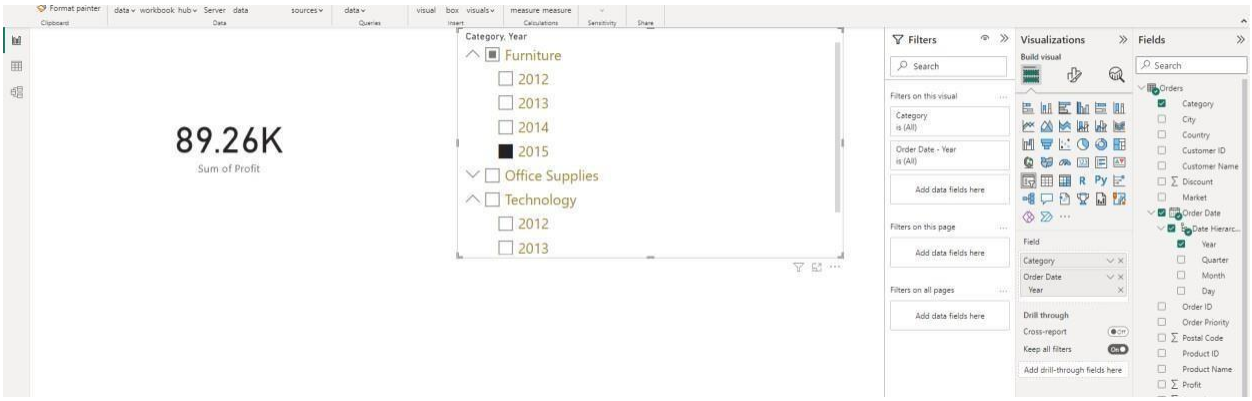

Load
Orders
7.27 KB from global_superstore_2016.xlsx
Returns
88.2 KB from global_superstore_2016.xlsx
People
52.8 KB from global_superstore_2016.xlsx
Cancel
Add d
Once loaded, your
Import data from SQL
Get data from another source →


Select or drag fields to populate this visual
Filters
Visualizations
Fields
Search
Filters on this visual
Add data fields here
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Build visual
Drill through
Cross-report
Keep all filters
Add drill-through fields here
Orders
Category
City
Country
Customer ID
Customer Name
Discount
Market
Order Date
Order ID
Order Priority
Postal Code
Product ID
Product Name
Profit
Quantity
Region
Row ID
Sales
Segment
Ship Date
Ship Mode
Shipping Cost
State
Sub-Category
People
Returns

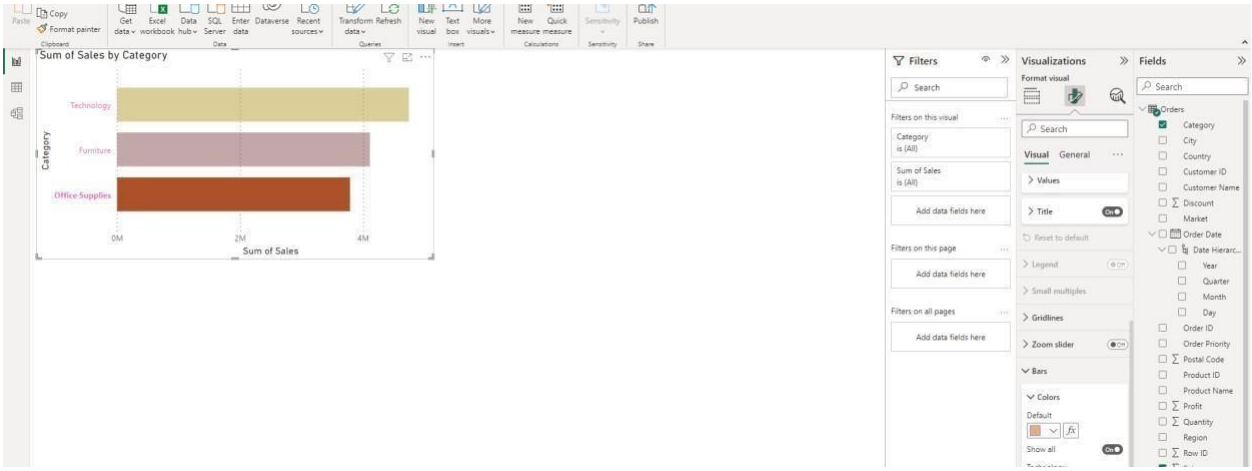

1.47M
Sum of Profit
Filters
Visualizations
Fields

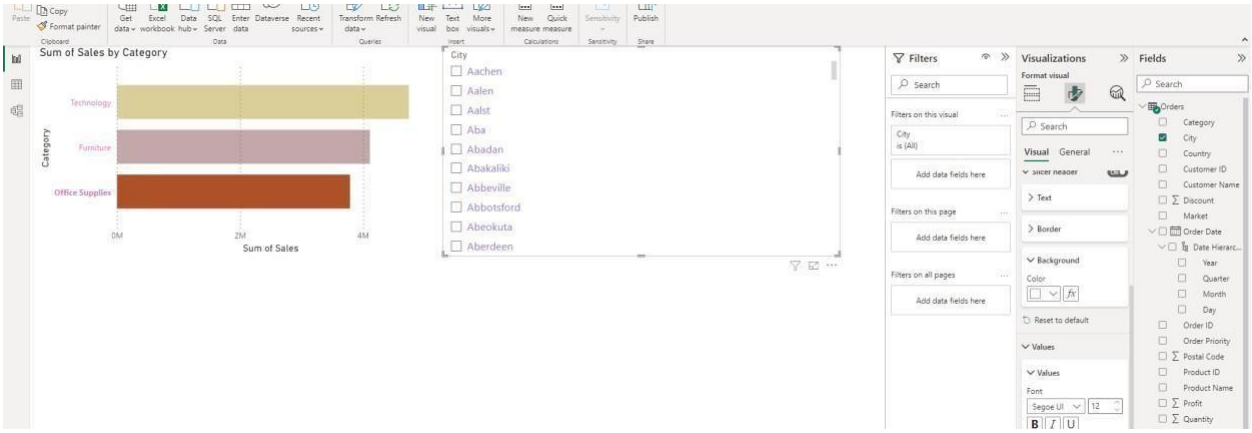

1.47M
Sum of Profit
Year
2012
2013
2014
2015
Filters
Visualizations
Fields

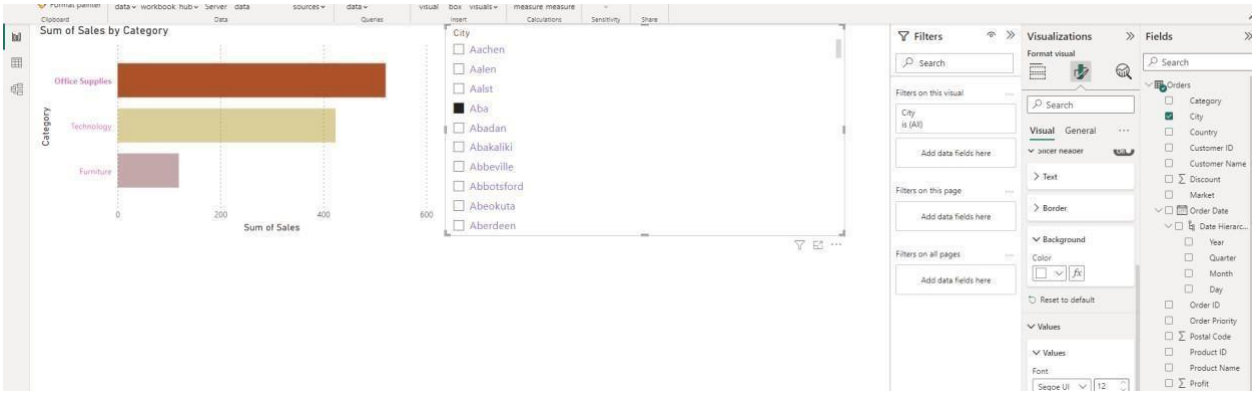

518.60K
Sum of Profit
Category
Furniture
Office Supplies
Technology
Filters
Visualizations
Fields

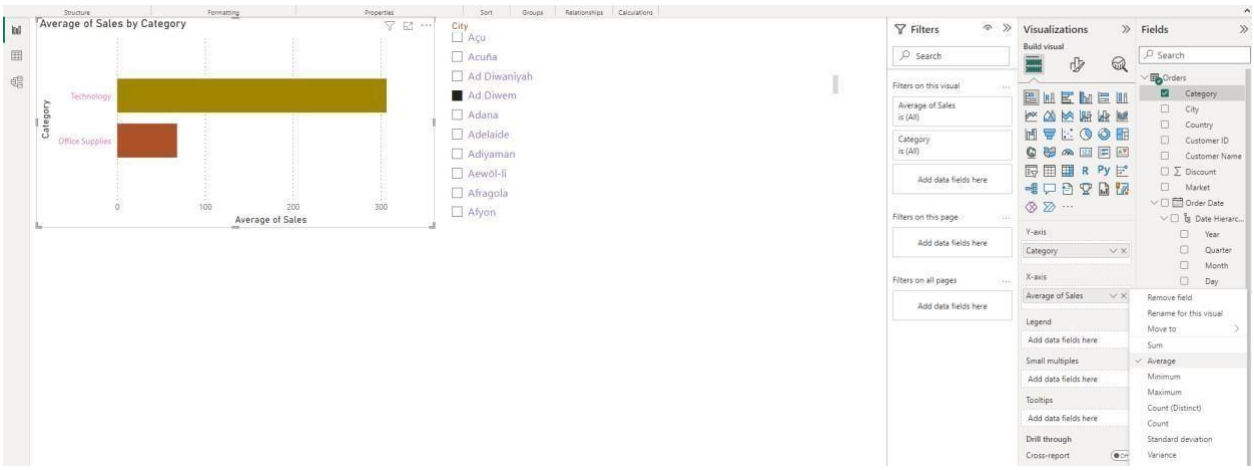

89.26K
Sum of Profit
Category, Year
Furniture
2012
2013
2014
2015
Office Supplies
Technology
2012
2013
Filters
Visualizations
Fields

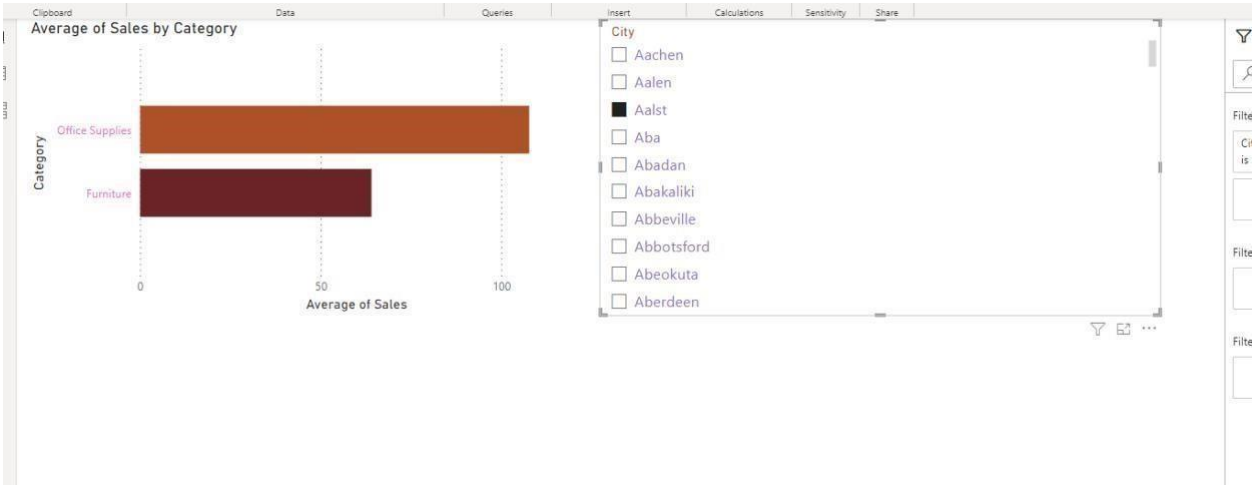
NEW PAGE

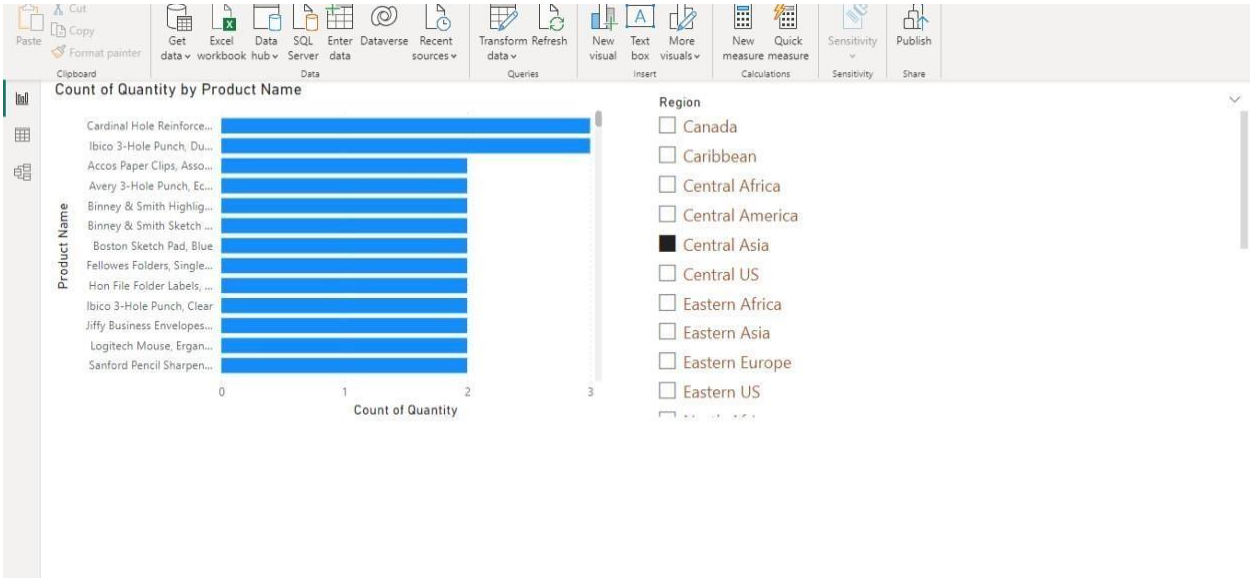

Sum of Sales by Category
Technology
Furniture
Office Supplies
Category
0M
2M
4M
Sum of Sales
Filters
Visualizations
Fields


Sum of Sales by Category
Technology
Furniture
Office Supplies
Category
0M
2M
4M
Sum of Sales
City
Aachen
Aalen
Aalst
Aba
Abadan
Abakaliki
Abbeville
Abbotsford
Abeokuta
Aberdeen
Filters
Visualizations
Fields

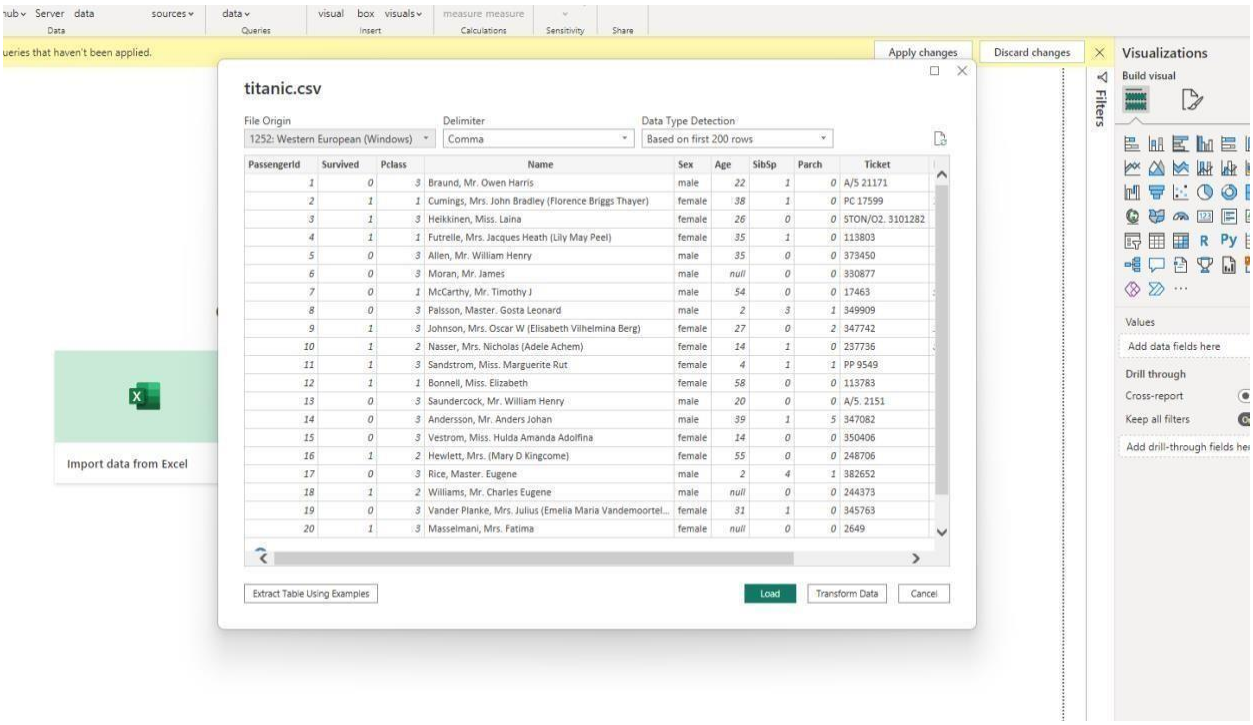

Sum of Sales by Category
Office Supplies
Technology
Furniture
Category
0
200
400
600
Sum of Sales
City
Aachen
Aalen
Aalst
Aba
Abadan
Abakaliki
Abbeville
Abbotsford
Abeokuta
Aberdeen
Filters
Search
Filters on this visual
City
is (All)
Add data fields here
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Format visual
Search
Visual
General
Text
Border
Background
Color
Reset to default
Values
Values
Font
Segoe UI
12
Fields
Search
Orders
Category
City
Country
Customer ID
Customer Name
Discount
Market
Order Date
Date Hierarc...
Year
Quarter
Month
Day
Order ID
Order Priority
Postal Code
Product ID
Product Name
Profit

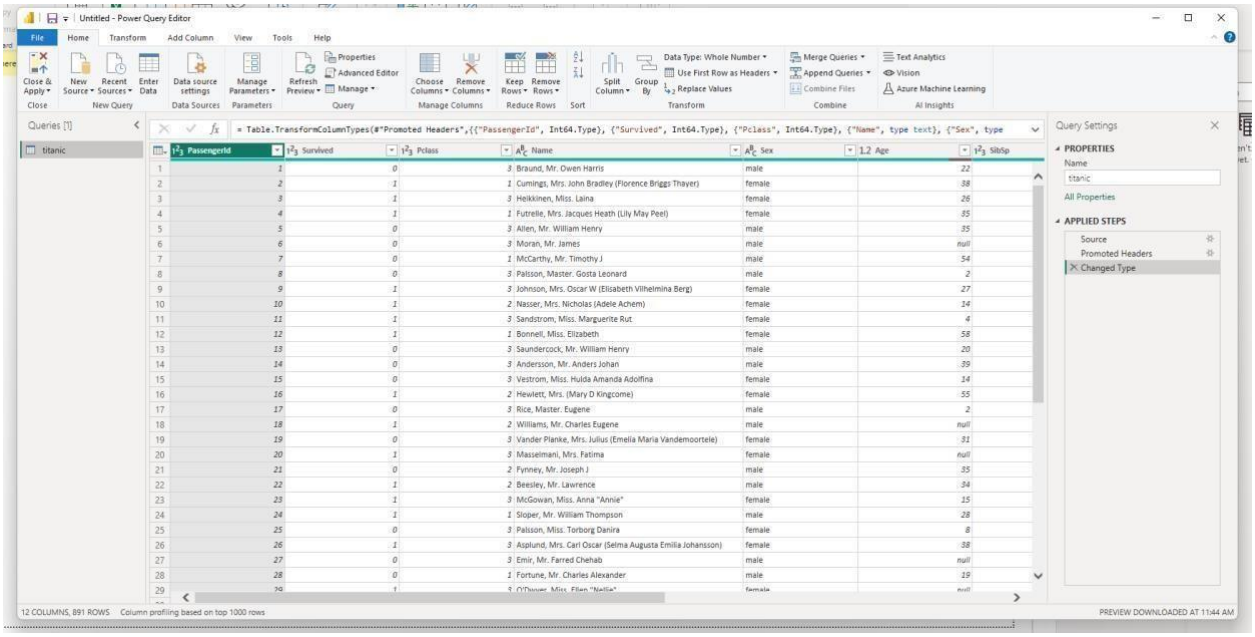

Average of Sales by Category
Technology
Office Supplies
Category
0
100
200
300
Average of Sales
City
Açu
Acuña
Ad Diwaniyah
Ad Diwem
Adana
Adelaide
Adiyaman
Aewöl-li
Afragola
Afyon
Filters
Search
Filters on this visual
Average of Sales
is (All)
Category
is (All)
Add data fields here
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Build visual
Y-axis
Category
X-axis
Average of Sales
Legend
Add data fields here
Small multiples
Add data fields here
Tooltips
Add data fields here
Drill through
Cross-report
Fields
Search
Orders
Category
City
Country
Customer ID
Customer Name
Discount
Market
Order Date
Date Hierarc...
Year
Quarter
Month
Day
Remove field
Rename for this visual
Move to
Sum
Average
Minimum
Maximum
Count (Distinct)
Count
Standard deviation
Variance


Clipboard
Data
Queries
Insert
Calculations
Sensitivity
Share
Average of Sales by Category
Office Supplies
Furniture
Category
0
50
100
Average of Sales
City
Aachen
Aalen
Aalst
Aba
Abadan
Abakaliki
Abbeville
Abbotsford
Abeokuta
Aberdeen

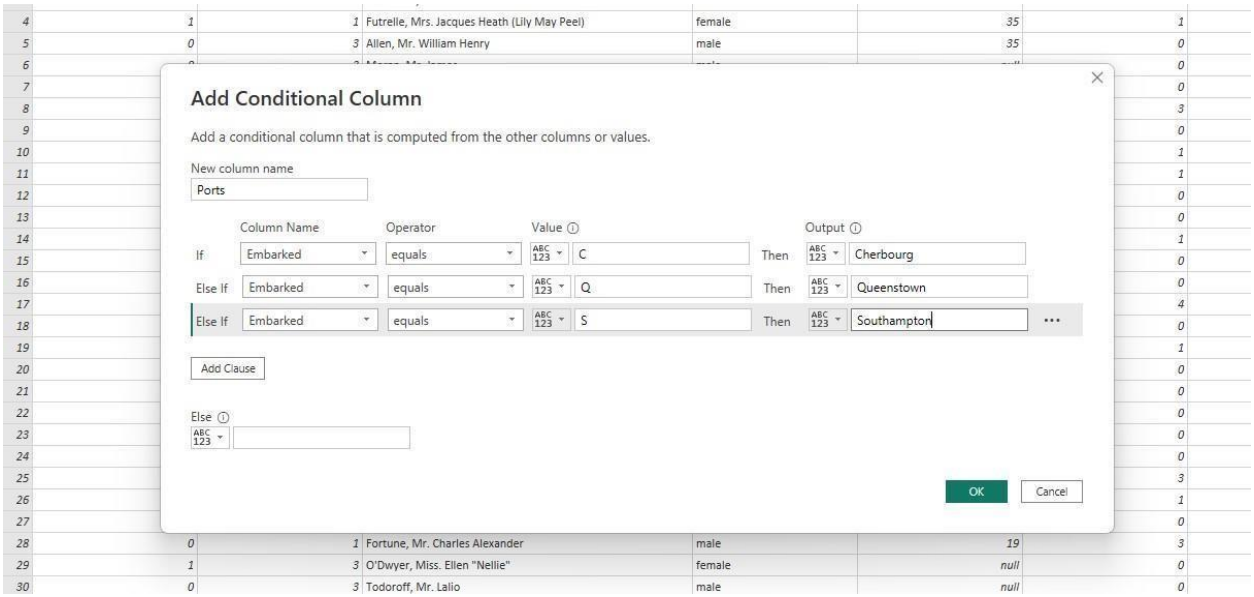

Count of Quantity by Product Name
Cardinal Hole Reinforce...
Ibico 3-Hole Punch, Du...
Accos Paper Clips, Asso...
Avery 3-Hole Punch, Ec...
Binney & Smith Highlig...
Binney & Smith Sketch ...
Boston Sketch Pad, Blue
Fellowes Folders, Single...
Hon File Folder Labels, ...
Ibico 3-Hole Punch, Clear
Jiffy Business Envelopes...
Logitech Mouse, Ergan...
Sanford Pencil Sharpen...
Product Name
0
1
2
3
Count of Quantity
Region
Canada
Caribbean
Central Africa
Central America
Central Asia
Central US
Eastern Africa
Eastern Asia
Eastern Europe
Eastern US

MAP


Apply changes
Discard changes
titanic.csv
File Origin
1252: Western European (Windows)
Delimiter
Comma
Data Type Detection
Based on first 200 rows
PassengerId Survived Pclass Name Sex Age SibSp Parch Ticket
1 0 3 Braund, Mr. Owen Harris male 22 1 0 A/5 21171
2 1 1 Cumings, Mrs. John Bradley (Florence Briggs Thayer) female 38 1 0 PC 17599
3 1 3 Heikkinen, Miss. Laina female 26 0 0 STON/O2. 3101282
4 1 1 Futrelle, Mrs. Jacques Heath (Lily May Peel) female 35 1 0 113803
5 0 3 Allen, Mr. William Henry male 35 0 0 373450
6 0 3 Moran, Mr. James male null 0 0 330877
7 0 1 McCarthy, Mr. Timothy J male 54 0 0 17463
8 0 3 Palsson, Master. Gosta Leonard male 2 3 1 349909
9 1 3 Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) female 27 0 2 347742
10 1 2 Nasser, Mrs. Nicholas (Adele Achem) female 14 1 0 237736
11 1 3 Sandstrom, Miss. Marguerite Rut female 4 1 1 PP 9549
12 1 1 Bonnell, Miss. Elizabeth female 58 0 0 113783
13 0 3 Saundercock, Mr. William Henry male 20 0 0 A/5. 2151
14 0 3 Andersson, Mr. Anders Johan male 39 1 5 347082
15 0 3 Vestrom, Miss. Hulda Amanda Adolfina female 14 0 0 350406
16 1 2 Hewlett, Mrs. (Mary D Kingcome) female 55 0 0 248706
17 0 3 Rice, Master. Eugene male 2 4 1 382652
18 1 2 Williams, Mr. Charles Eugene male null 0 0 244373
19 0 3 Vander Planke, Mrs. Julius (Emelia Maria Vandemoortel... female 31 1 0 345763
20 1 3 Masselmani, Mrs. Fatima female null 0 0 2649
Extract Table Using Examples
Load
Transform Data
Cancel
Import data from Excel
Visualizations
Build visual
Values
Add data fields here
Drill through
Cross-report
Keep all filters
Filters




| | Survived | Pclass | Name | Sex | Age | SibSp | Parch |
|---|---|---|---|---|---|---|---|
| 1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22 | 1 | |
| 2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Thayer) | female | 38 | 1 | |
| 3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | |
| 4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35 | 1 | |
| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | |
| 6 | | | | | | 0 | |
| 7 | | | | | | 0 | |
| 8 | | | | | | 3 | |
| 9 | | | | | | 0 | |
| 10 | | | | | | 1 | |
| 11 | | | | | | 1 | |
| 12 | | | | | | 0 | |
| 13 | | | | | | 0 | |
| 14 | | | | | | 1 | |
| 15 | | | | | | 0 | |
| 16 | | | | | | 0 | |
| 17 | | | | | | 4 | |
| 18 | | | | | | 0 | |
| 19 | | | | | | 1 | |
| 20 | | | | | | 0 | |
| 21 | | | | | | 0 | |
| 22 | | | | | | 0 | |
| 23 | | | | | | 0 | |
| 24 | | | | | | 0 | |
| 25 | 0 | 3 | Palsson, Miss. Torborg Danira | female | 8 | 3 | |
| 26 | 1 | 3 | Asplund, Mrs. Carl Oscar (Selma Augusta Emilia Johansson) | female | 38 | 1 | |
| 27 | 0 | 3 | Emir, Mr. Farred Chehab | male | null | 0 | |
| 28 | 0 | 1 | Fortune, Mr. Charles Alexander | male | 19 | 3 | |
| 29 | 1 | 3 | O'Dwyer, Miss. Ellen "Nellie" | female | null | 0 | |

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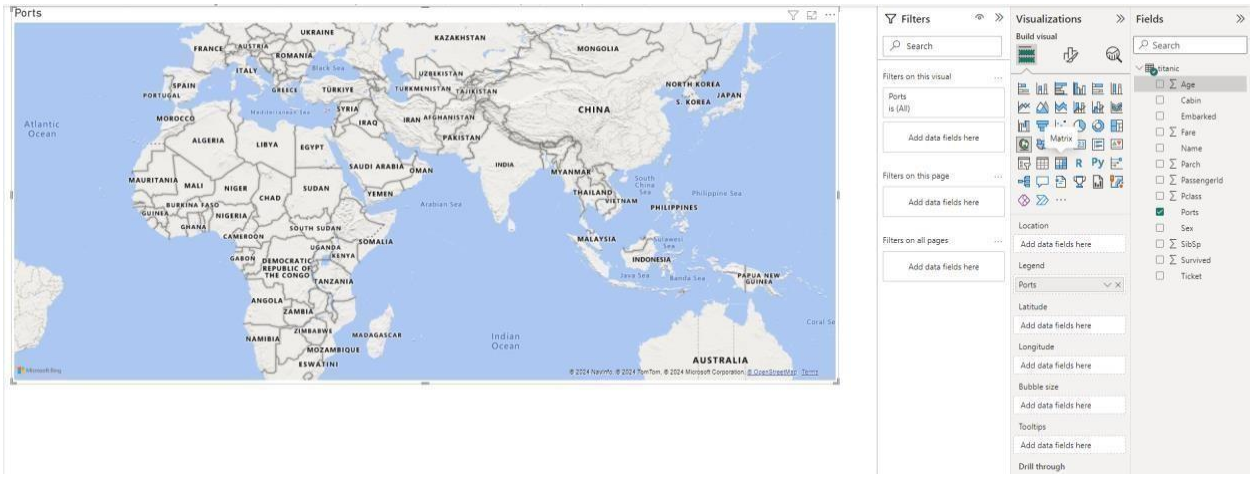
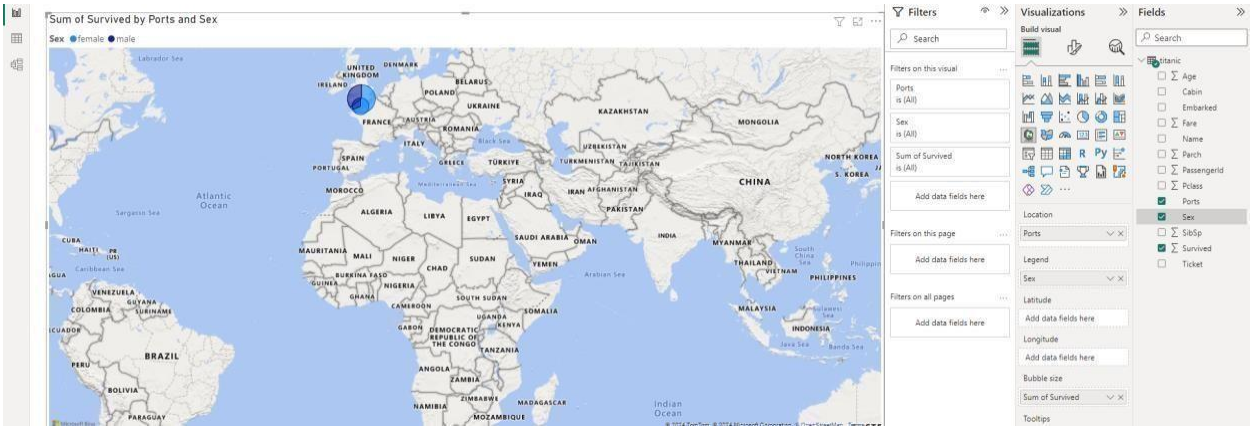
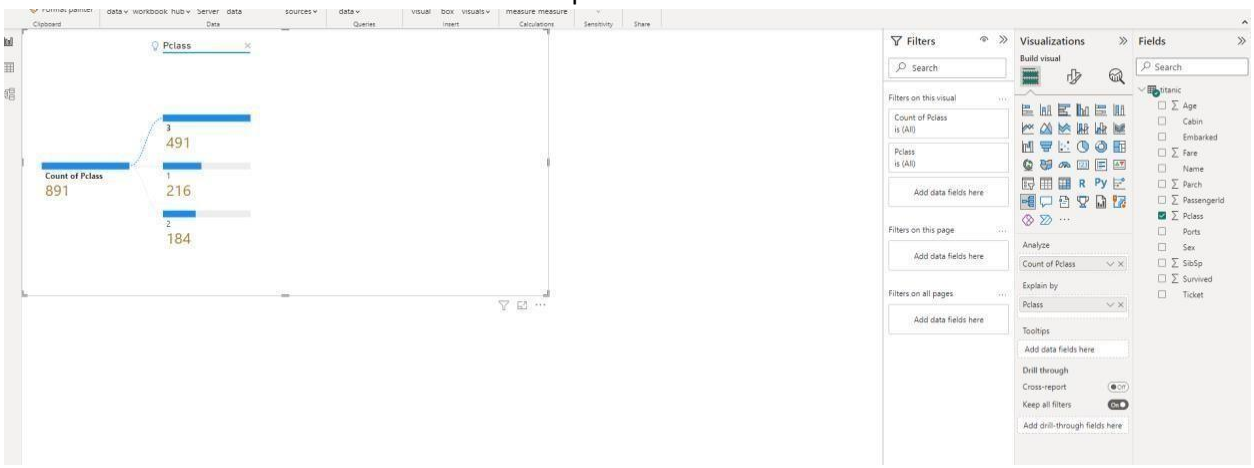
Select map!!



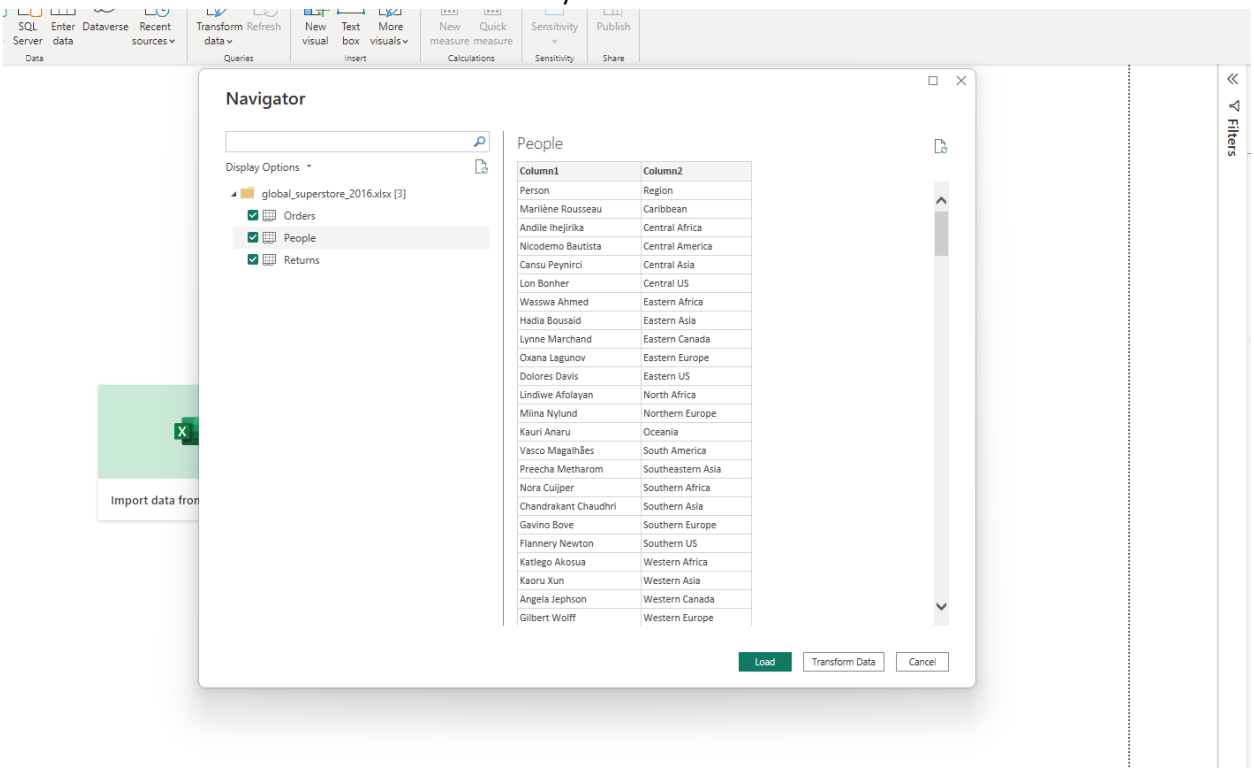

Ticket!!!

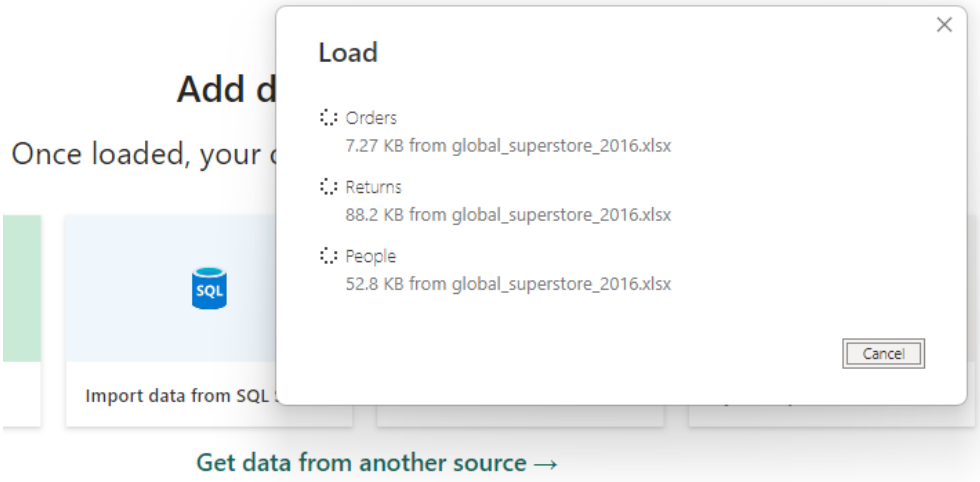
# Decomposition Tree

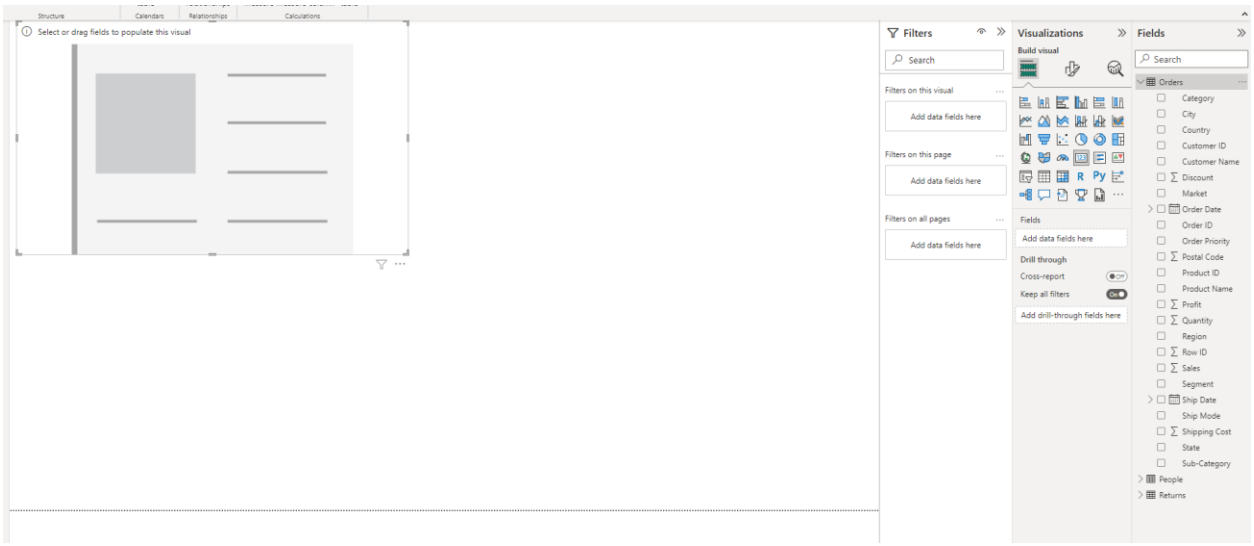


**Practical 2A**

Shreyash Phatak470

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Filters
Search
Filters on this visual
Add data fields here
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Build visual
Fields
Add data fields here
Drill through
Cross-report
Keep all filters
Add drill-through fields here
Fields
Search
Orders
Category
City
Country
Customer ID
Customer Name
Discount
Market
Order Date
Order ID
Order Priority
Postal Code
Product ID
Product Name
Profit
Quantity
Region
Row ID
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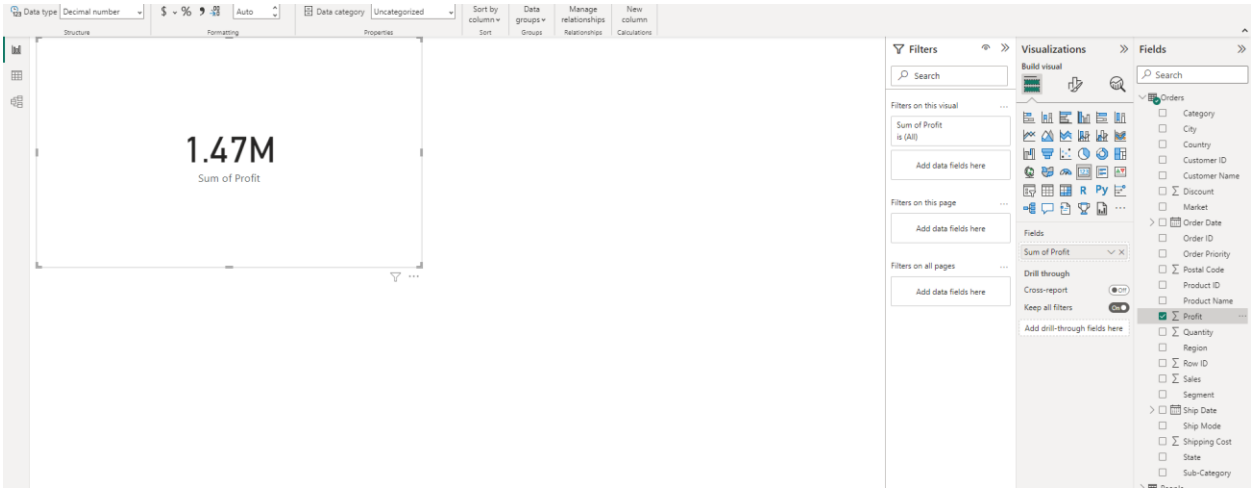
Ship Mode
Shipping Cost
State
Sub-Category
People
Returns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Sum of Profit
Filters
Search
Filters on this visual
Sum of Profit
is (All)
Add data fields here
Filters on this page
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Filters on all pages
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Visualizations
Build visual
Fields
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Drill through
Cross-report
Keep all filters
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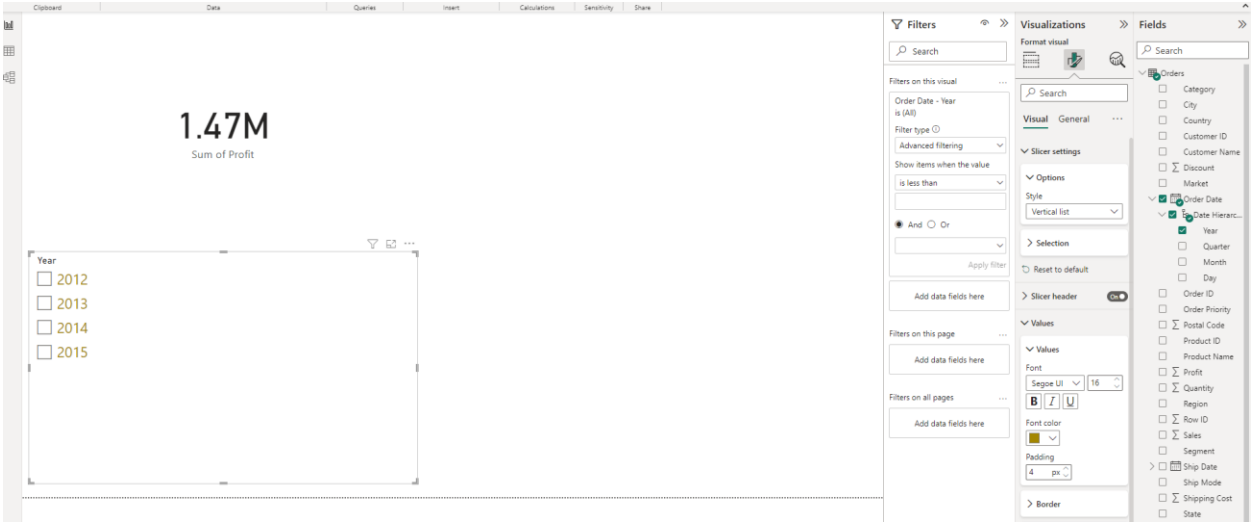
Search
Orders
Sum of Profit
Profit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Sum of Profit
Year
2012
2013
2014
2015
Filters
Search
Filters on this visual
Order Date - Year
is (All)
Filter type
Advanced filtering
Show items when the value
is less than
And
Or
Apply filter
Add data fields here
Filters on this page
Add data fields here
Filters on all pages
Add data fields here
Visualizations
Format visual
Search
Visual
General
Slicer settings
Options
Style
Vertical list
Selection
Reset to default
Slicer header
Values
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Font
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Font color
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Orders
Order Date
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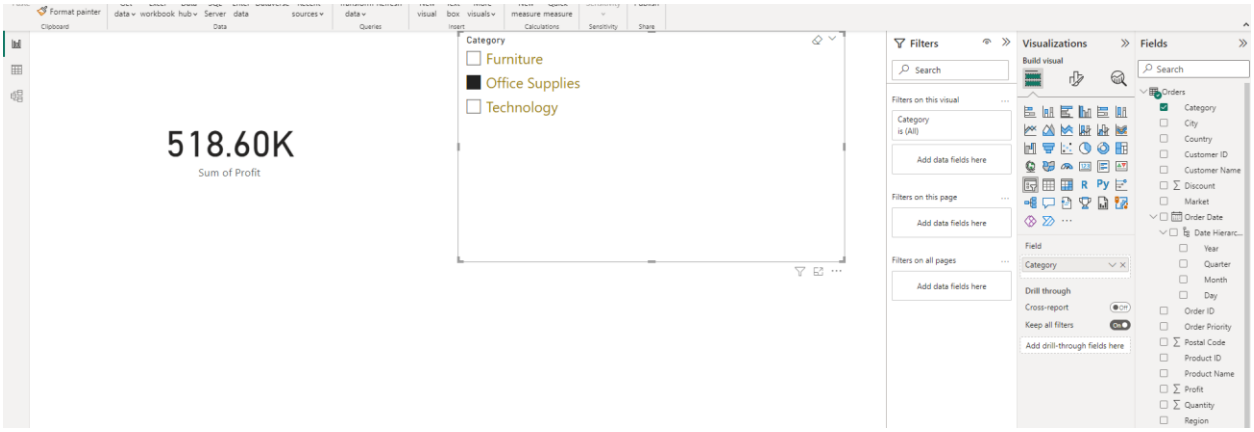
Month
Day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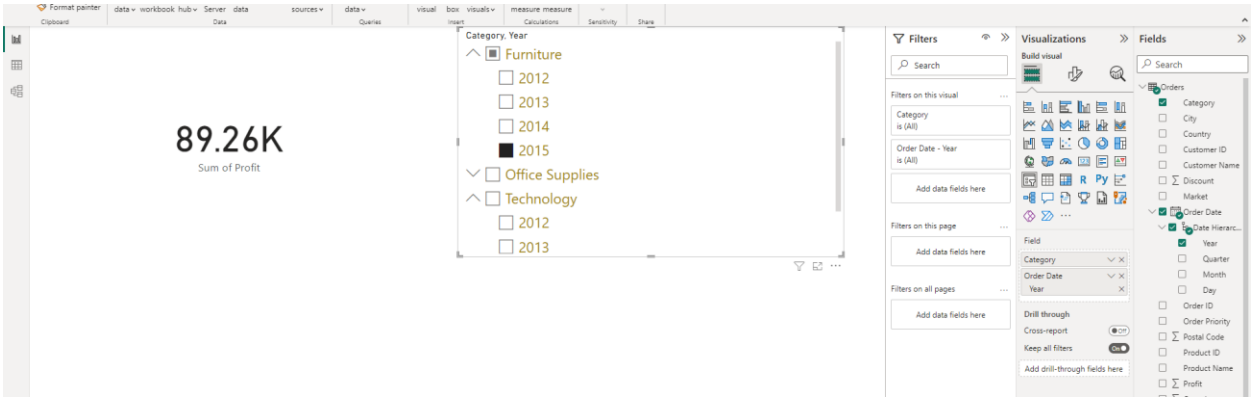
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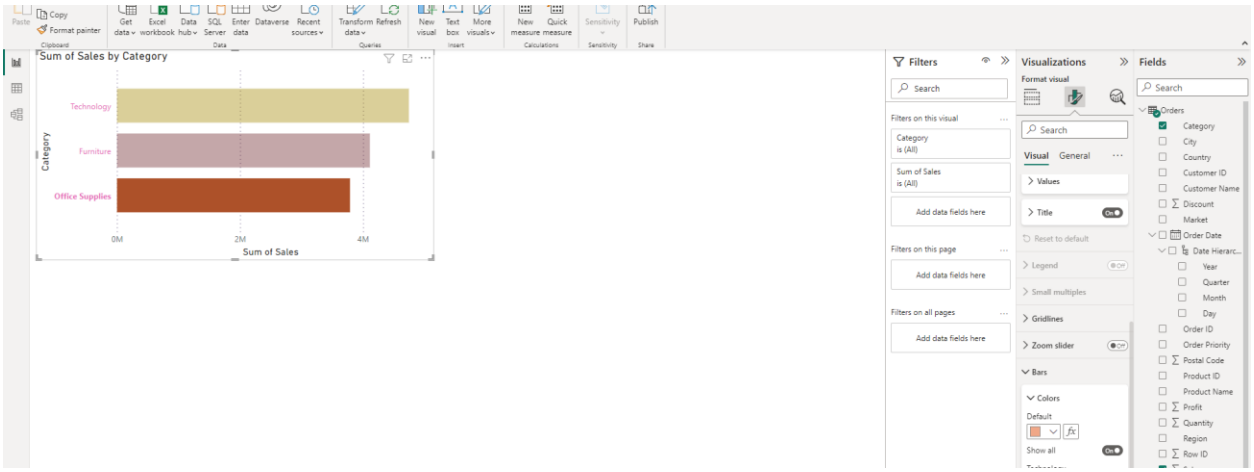
Category, Year
Furniture
2012
2013
2014
2015
Office Supplies
Technology
2012
2013
Filters
Visualizations
Fields

NEW PAGE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Furniture
Office Supplies
Category
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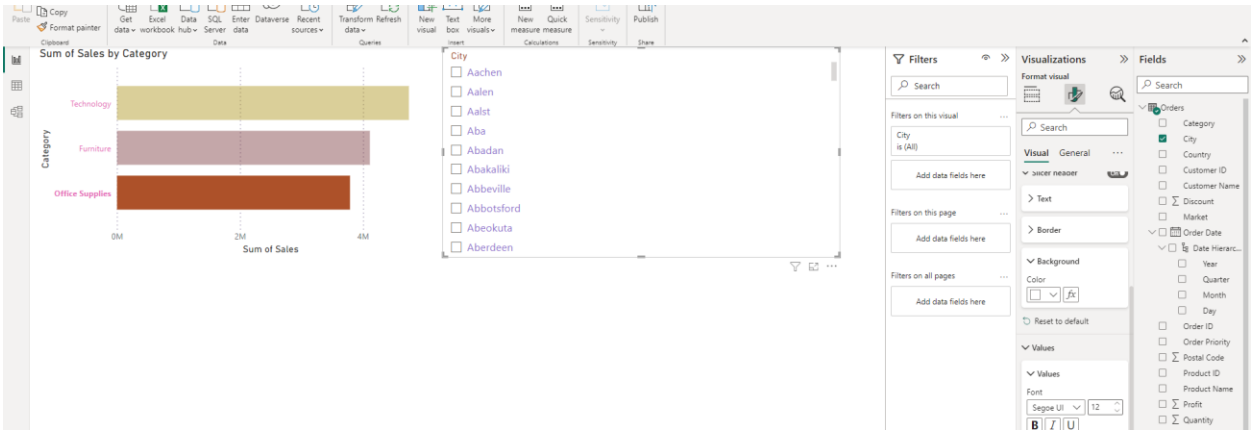
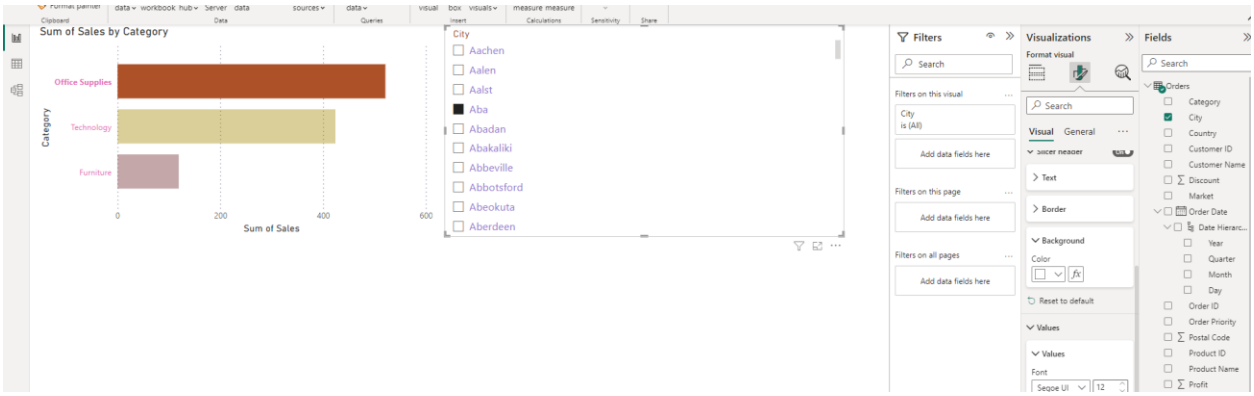
2M
4M
Sum of Sales
Filters
Visualizations
Fields


Sum of Sales by Category
Technology
Furniture
Office Supplies
Category
0M
2M
4M
Sum of Sales
City
Aachen
Aalen
Aalst
Aba
Abadan
Abakaliki
Abbeville
Abbotsford
Abeokuta
Aberdeen
Filters
Visualizations
Fields


Sum of Sales by Category
Office Supplies
Technology
Furniture
Category
0
200
400
600
Sum of Sales
City
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Aalen
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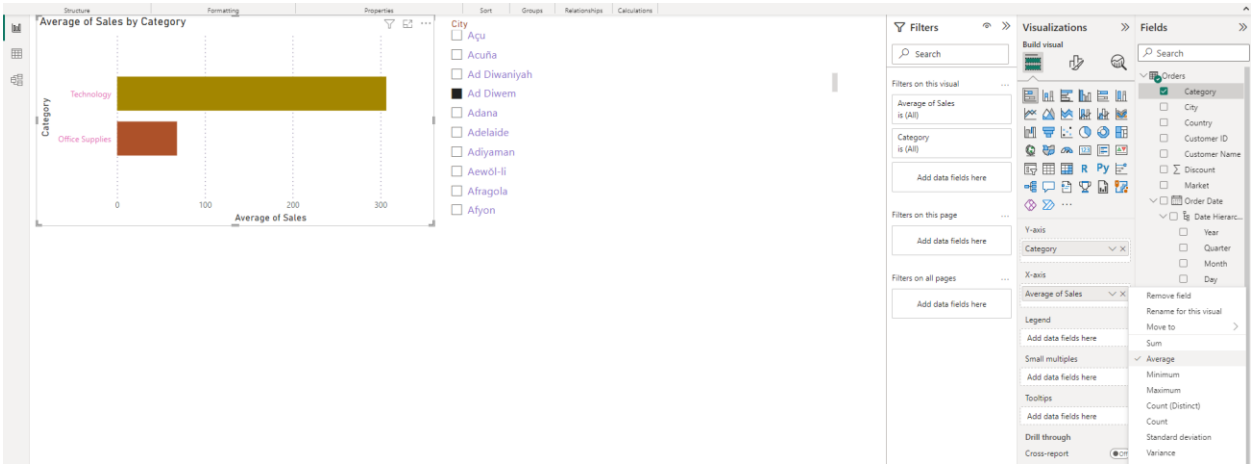
Aberdeen
Filters
Visualizations
Fields


Average of Sales by Category
Technology
Office Supplies
Category
0
100
200
300
Average of Sales
City
Açu
Acuña
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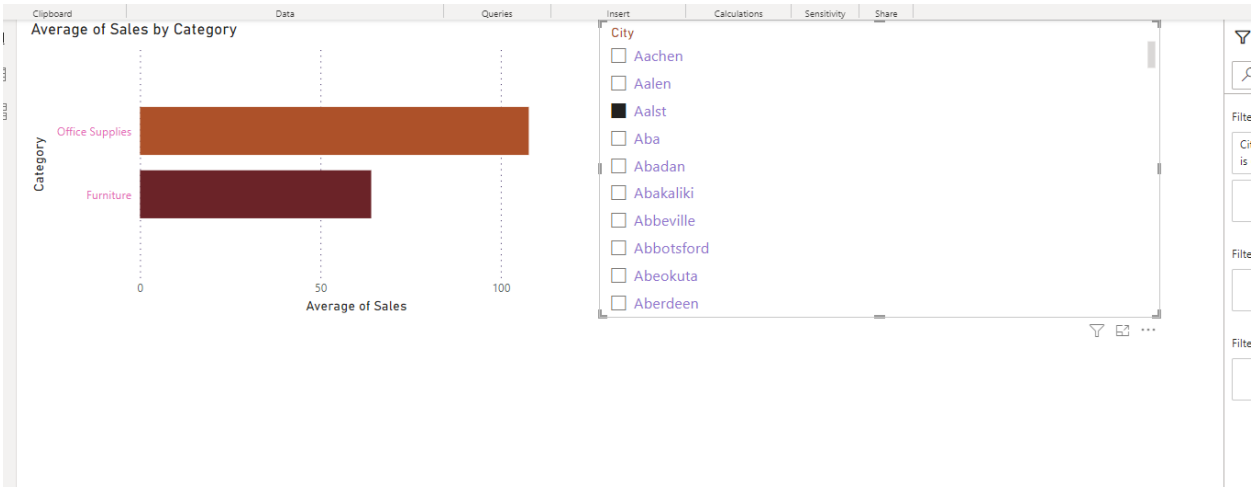
Filters
Visualizations
Fields


Clipboard
Data
Queries
Insert
Calculations
Sensitivity
Share
Average of Sales by Category
Category
Office Supplies
Furniture
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50
100
Average of Sales
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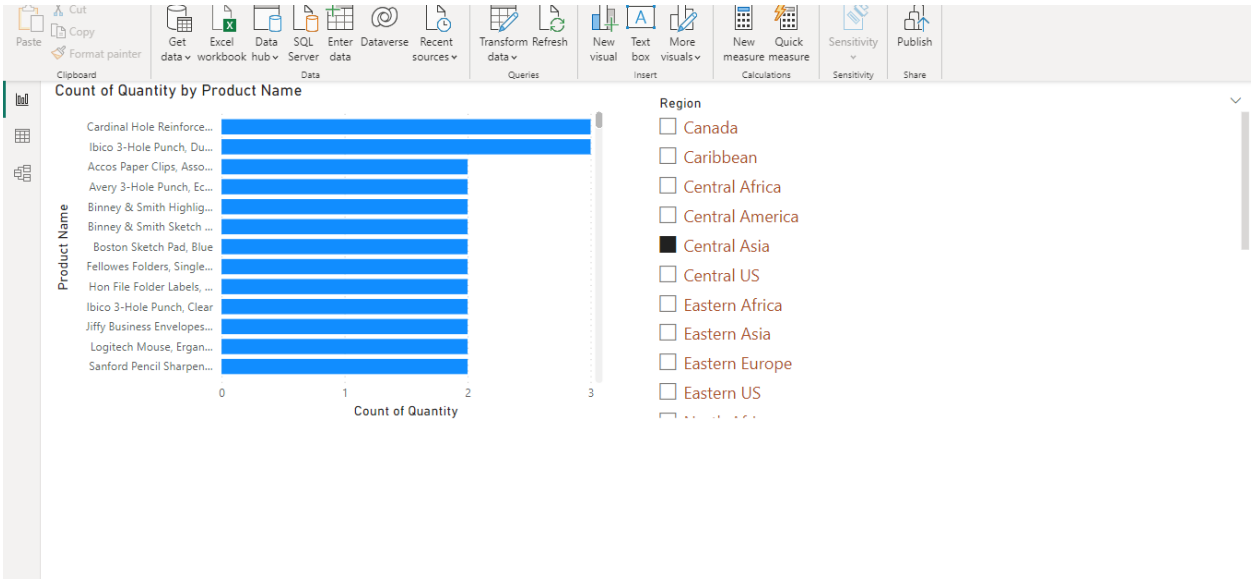
Abbeville
Abbotsford
Abeokuta
Aberdeen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Cut
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Excel workbook
Data hub
SQL Server
Enter data
Dataverse
Recent sources
Data
Transform data
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New visual
Text box
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New measure
Quick measure
Calculations
Sensitivity
Publish
Share
Count of Quantity by Product Name
Product Name
Cardinal Hole Reinforce...
Ibico 3-Hole Punch, Du...
Accos Paper Clips, Asso...
Avery 3-Hole Punch, Ec...
Binney & Smith Highlig...
Binney & Smith Sketch ...
Boston Sketch Pad, Blue
Fellowes Folders, Single...
Hon File Folder Labels, ...
Ibico 3-Hole Punch, Clear
Jiffy Business Envelopes...
Logitech Mouse, Ergan...
Sanford Pencil Sharpen...
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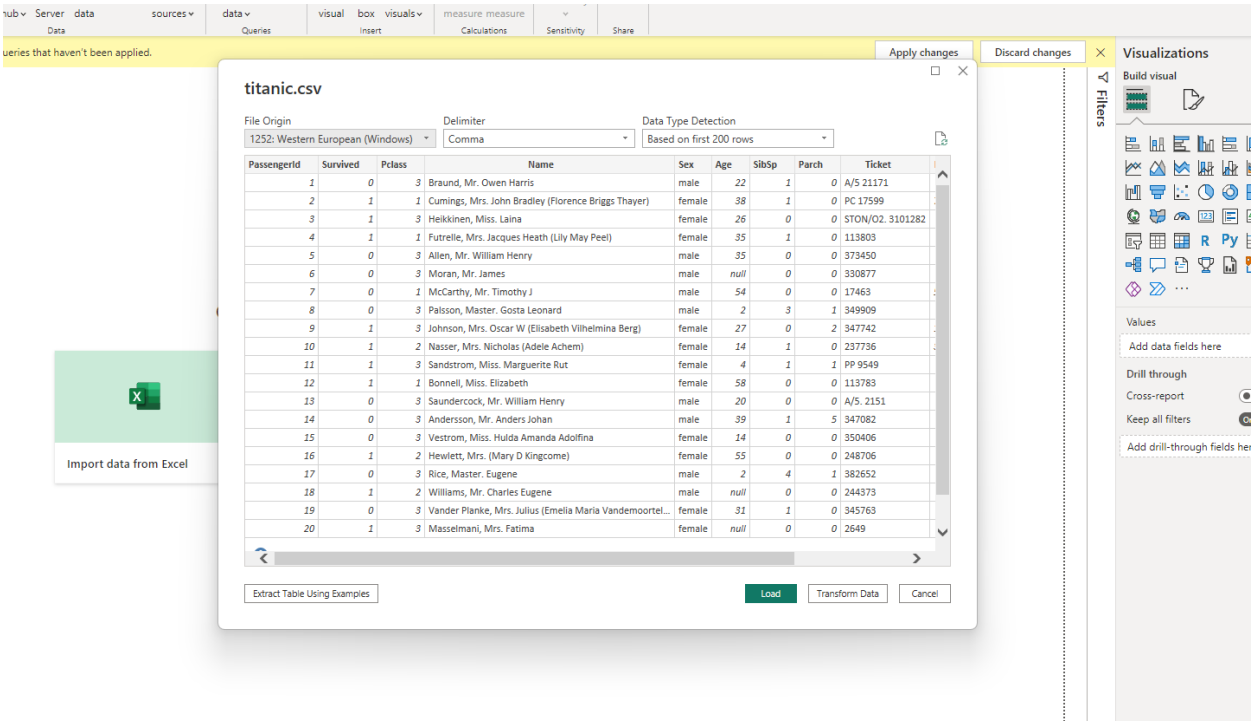
MAP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File Origin
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Delimiter
Comma
Data Type Detection
Based on first 200 rows
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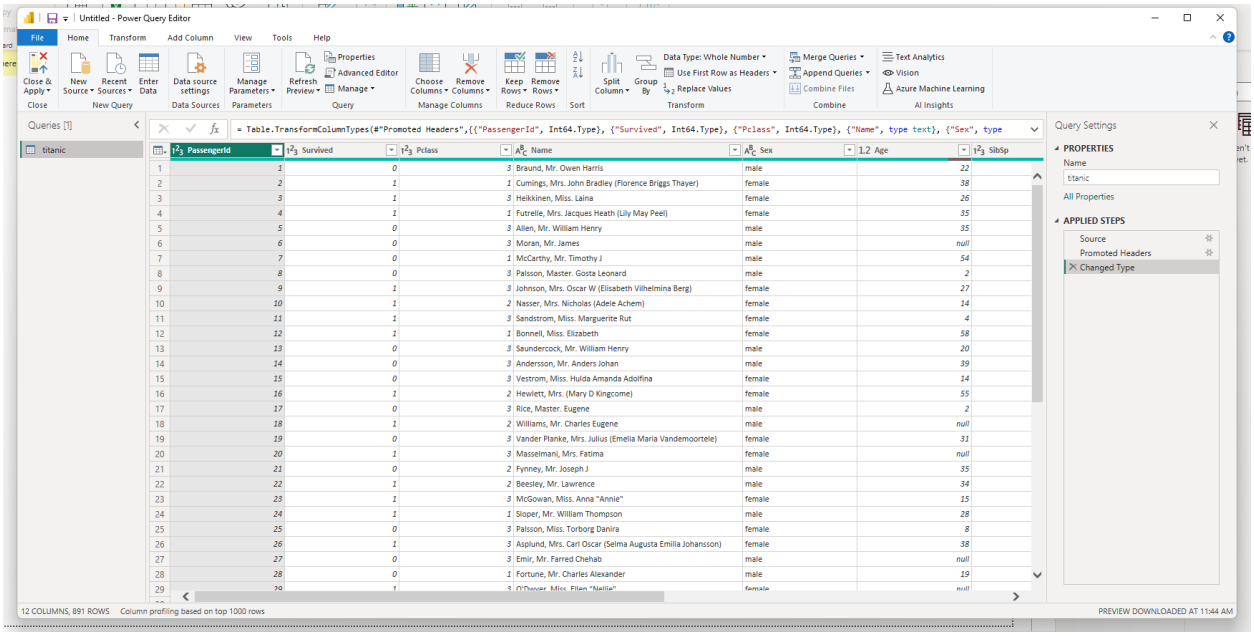
1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22 | 1 | 0 | A/5 21171
2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Thayer) | female | 38 | 1 | 0 | PC 17599
3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | 0 | STON/O2. 3101282
4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35 | 1 | 0 | 113803
5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | 0 | 373450
6 | 0 | 3 | Moran, Mr. James | male | null | 0 | 0 | 330877
7 | 0 | 1 | McCarthy, Mr. Timothy J | male | 54 | 0 | 0 | 17463
8 | 0 | 3 | Palsson, Master. Gosta Leonard | male | 2 | 3 | 1 | 349909
9 | 1 | 3 | Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) | female | 27 | 0 | 2 | 347742
10 | 1 | 2 | Nasser, Mrs. Nicholas (Adele Achem) | female | 14 | 1 | 0 | 237736
11 | 1 | 3 | Sandstrom, Miss. Marguerite Rut | female | 4 | 1 | 1 | PP 9549
12 | 1 | 1 | Bonnell, Miss. Elizabeth | female | 58 | 0 | 0 | 113783
13 | 0 | 3 | Saundercock, Mr. William Henry | male | 20 | 0 | 0 | A/5. 2151
14 | 0 | 3 | Andersson, Mr. Anders Johan | male | 39 | 1 | 5 | 347082
15 | 0 | 3 | Vestrom, Miss. Hulda Amanda Adolfina | female | 14 | 0 | 0 | 350406
16 | 1 | 2 | Hewlett, Mrs. (Mary D Kingcome) | female | 55 | 0 | 0 | 248706
17 | 0 | 3 | Rice, Master. Eugene | male | 2 | 4 | 1 | 382652
18 | 1 | 2 | Williams, Mr. Charles Eugene | male | null | 0 | 0 | 244373
19 | 0 | 3 | Vander Planke, Mrs. Julius (Emelia Maria Vandemoortel... | female | 31 | 1 | 0 | 345763
20 | 1 | 3 | Masselmani, Mrs. Fatima | female | null | 0 | 0 | 2649
Extract Table Using Examples
Load
Transform Data
Cancel
Import data from Excel
Visualizations
Build visual
Filters
Values
Add data fields here
Drill through
Cross-report
Keep all filters
Add drill-through fields here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File
Home
Transform
Add Column
View
Tools
Help
Queries [1]
titanic
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PassengerId | Survived | Pclass | Name | Sex | Age | SibSp
1 | 0 | 3 | Braund, Mr. Owen Harris | male | 22
2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Thayer) | female | 38
3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26
4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35
5 | 0 | 3 | Allen, Mr. William Henry | male | 35
6 | 0 | 3 | Moran, Mr. James | male | null
7 | 0 | 1 | McCarthy, Mr. Timothy J | male | 54
8 | 0 | 3 | Palsson, Master. Gosta Leonard | male | 2
9 | 1 | 3 | Johnson, Mrs. Oscar W (Elisabeth Vilhelmina Berg) | female | 27
10 | 1 | 2 | Nasser, Mrs. Nicholas (Adele Achem) | female | 14
11 | 1 | 3 | Sandstrom, Miss. Marguerite Rut | female | 4
12 | 1 | 1 | Bonnell, Miss. Elizabeth | female | 58
13 | 0 | 3 | Saundercock, Mr. William Henry | male | 20
14 | 0 | 3 | Andersson, Mr. Anders Johan | male | 39
15 | 0 | 3 | Vestrom, Miss. Hulda Amanda Adolfina | female | 14
16 | 1 | 2 | Hewlett, Mrs. (Mary D Kingcome) | female | 55
17 | 0 | 3 | Rice, Master. Eugene | male | 2
18 | 1 | 2 | Williams, Mr. Charles Eugene | male | null
19 | 0 | 3 | Vander Planke, Mrs. Julius (Emelia Maria Vandemoortele) | female | 31
20 | 1 | 3 | Masselmani, Mrs. Fatima | female | null
21 | 0 | 2 | Fynney, Mr. Joseph J | male | 35
22 | 1 | 2 | Beesley, Mr. Lawrence | male | 34
23 | 1 | 3 | McGowan, Miss. Anna "Annie" | female | 15
24 | 1 | 1 | Sloper, Mr. William Thompson | male | 28
25 | 0 | 3 | Palsson, Miss. Torborg Danira | female | 8
26 | 1 | 3 | Asplund, Mrs. Carl Oscar (Selma Augusta Emilia Johansson) | female | 38
27 | 0 | 3 | Emir, Mr. Farred Chehab | male | null
28 | 0 | 1 | Fortune, Mr. Charles Alexander | male | 19
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Source
Promoted Headers
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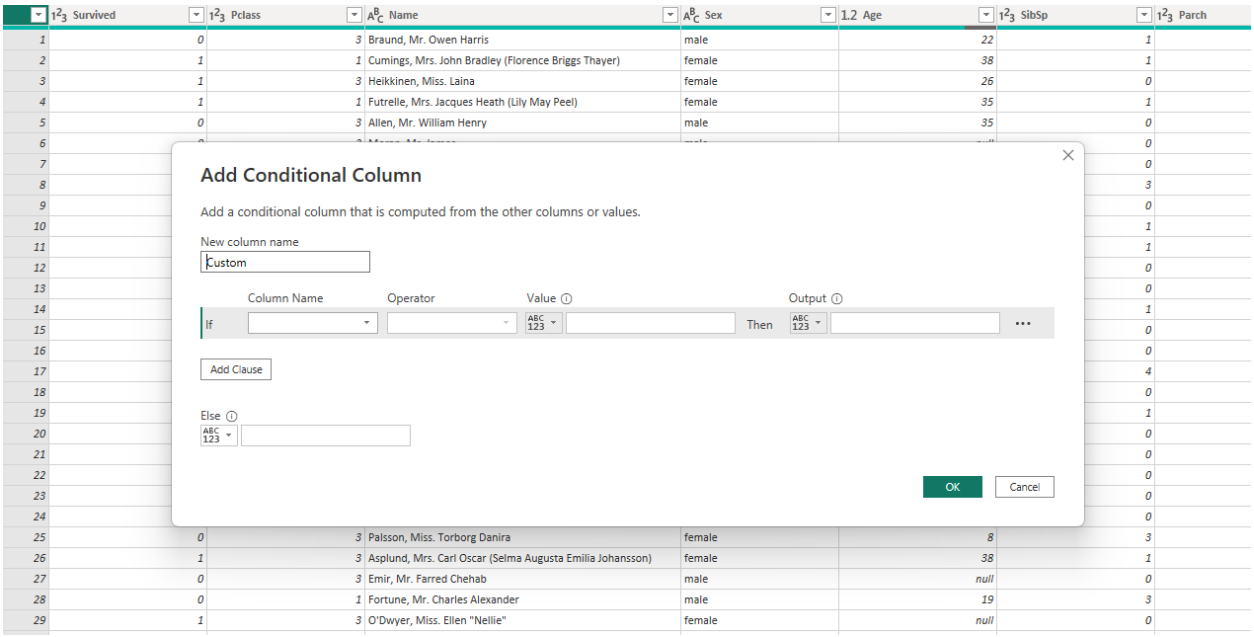

| | Survived | Pclass | Name | Sex | Age | SibSp | Parch |
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| 2 | 1 | 1 | Cumings, Mrs. John Bradley (Florence Briggs Thayer) | female | 38 | 1 | |
| 3 | 1 | 3 | Heikkinen, Miss. Laina | female | 26 | 0 | |
| 4 | 1 | 1 | Futrelle, Mrs. Jacques Heath (Lily May Peel) | female | 35 | 1 | |
| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | |
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| 7 | | | | | | 0 | |
| 8 | | | | | | 3 | |
| 9 | | | | | | 0 | |
| 10 | | | | | | 1 | |
| 11 | | | | | | 1 | |
| 12 | | | | | | 0 | |
| 13 | | | | | | 0 | |
| 14 | | | | | | 1 | |
| 15 | | | | | | 0 | |
| 16 | | | | | | 0 | |
| 17 | | | | | | 4 | |
| 18 | | | | | | 0 | |
| 19 | | | | | | 1 | |
| 20 | | | | | | 0 | |
| 21 | | | | | | 0 | |
| 22 | | | | | | 0 | |
| 23 | | | | | | 0 | |
| 24 | | | | | | 0 | |
| 25 | 0 | 3 | Palsson, Miss. Torborg Danira | female | 8 | 3 | |
| 26 | 1 | 3 | Asplund, Mrs. Carl Oscar (Selma Augusta Emilia Johansson) | female | 38 | 1 | |
| 27 | 0 | 3 | Emir, Mr. Farred Chehab | male | null | 0 | |
| 28 | 0 | 1 | Fortune, Mr. Charles Alexander | male | 19 | 3 | |
| 29 | 1 | 3 | O'Dwyer, Miss. Ellen "Nellie" | female | null | 0 | |

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

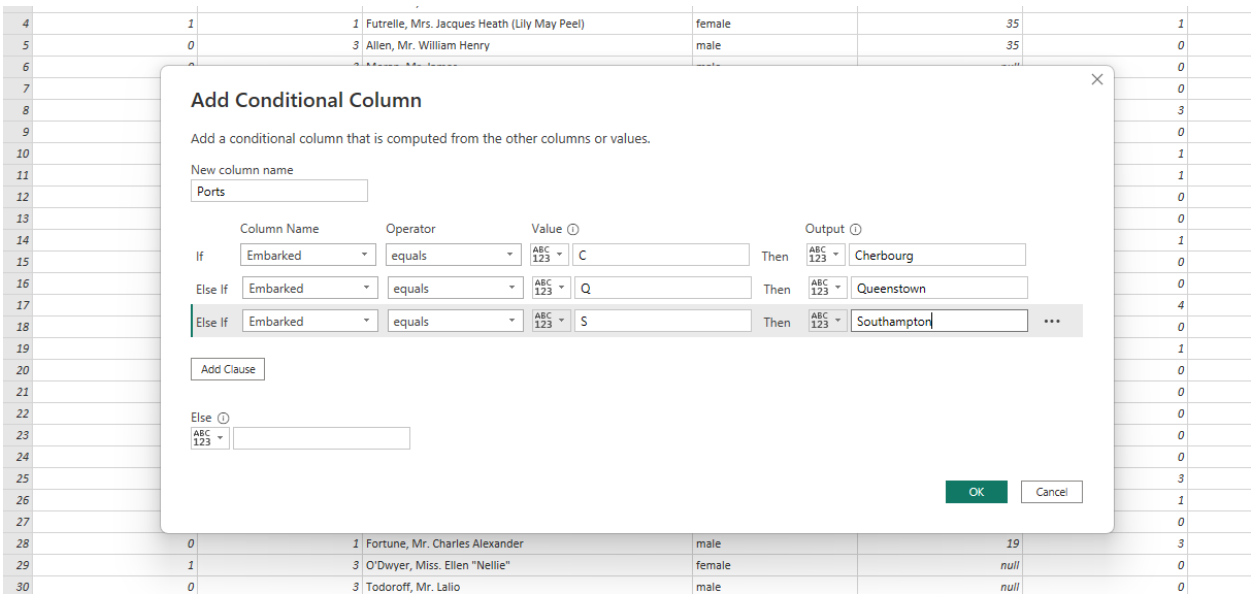
New column name: Custom

| | Column Name | Operator | Value | | Output |
|---|---|---|---|---|---|
| If | | | | Then | |

Add Clause

Else

OK Cancel



| | Survived | Pclass | Name | Sex | Age | SibSp | Parch |
|---|---|---|---|---|---|---|---|
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| 5 | 0 | 3 | Allen, Mr. William Henry | male | 35 | 0 | |
| 6 | | | | | | 0 | |
| 7 | | | | | | 0 | |
| 8 | | | | | | 3 | |
| 9 | | | | | | 0 | |
| 10 | | | | | | 1 | |
| 11 | | | | | | 1 | |
| 12 | | | | | | 0 | |
| 13 | | | | | | 0 | |
| 14 | | | | | | 1 | |
| 15 | | | | | | 0 | |
| 16 | | | | | | 0 | |
| 17 | | | | | | 4 | |
| 18 | | | | | | 0 | |
| 19 | | | | | | 1 | |
| 20 | | | | | | 0 | |
| 21 | | | | | | 0 | |
| 22 | | | | | | 0 | |
| 23 | | | | | | 0 | |
| 24 | | | | | | 0 | |
| 25 | | | | | | 3 | |
| 26 | | | | | | 1 | |
| 27 | | | | | | 0 | |
| 28 | 0 | 1 | Fortune, Mr. Charles Alexander | male | 19 | 3 | |
| 29 | 1 | 3 | O'Dwyer, Miss. Ellen "Nellie" | female | null | 0 | |
| 30 | 0 | 3 | Todoroff, Mr. Lalio | male | null | 0 | |

Add Conditional Column

Add a conditional column that is computed from the other columns or values.

New column name: Ports

| | Column Name | Operator | Value | | Output |
|---|---|---|---|---|---|
| If | Embarked | equals | C | Then | Cherbourg |
| Else If | Embarked | equals | Q | Then | Queenstown |
| Else If | Embarked | equals | S | Then | Southampton |

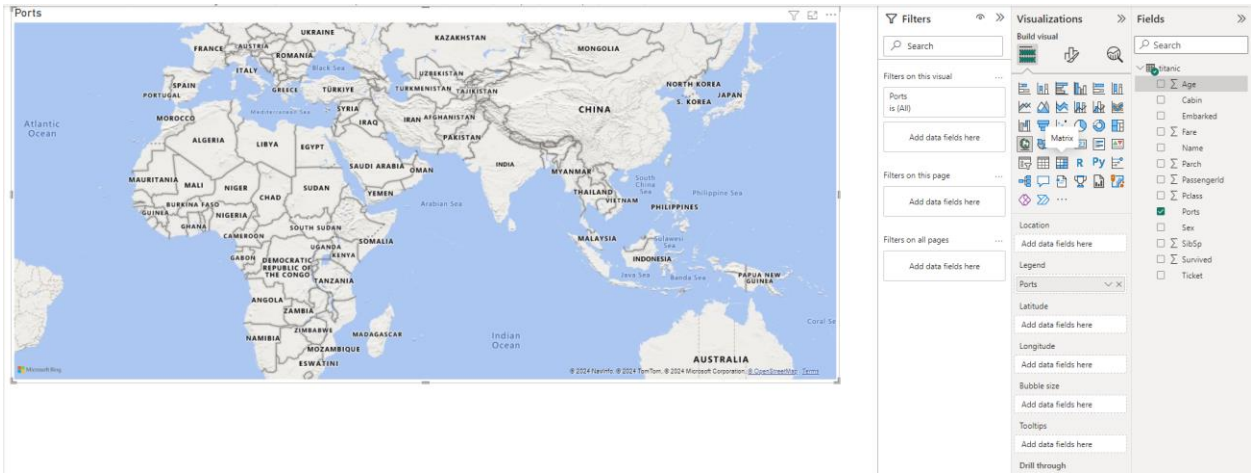
Add Clause

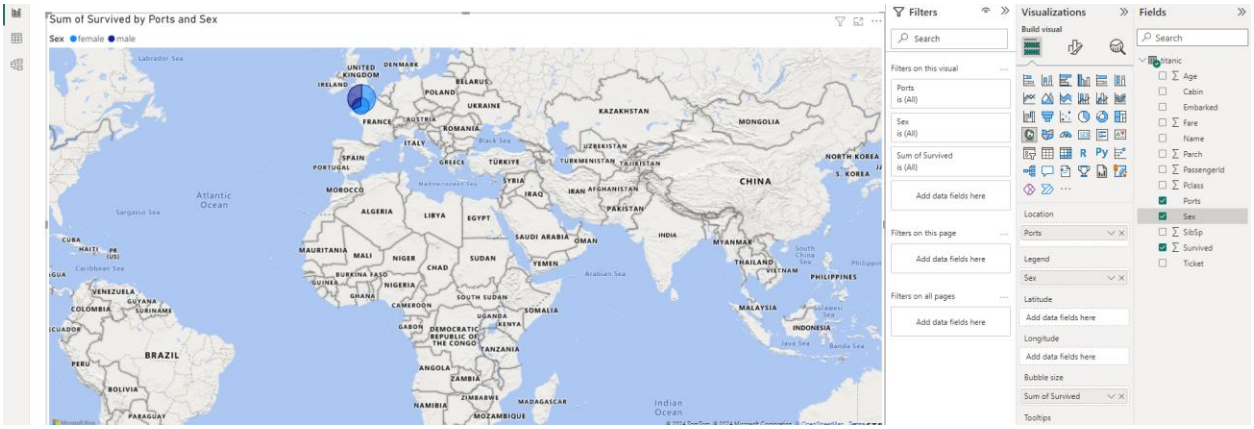
Else

OK Cancel

File > Close and apply!!!

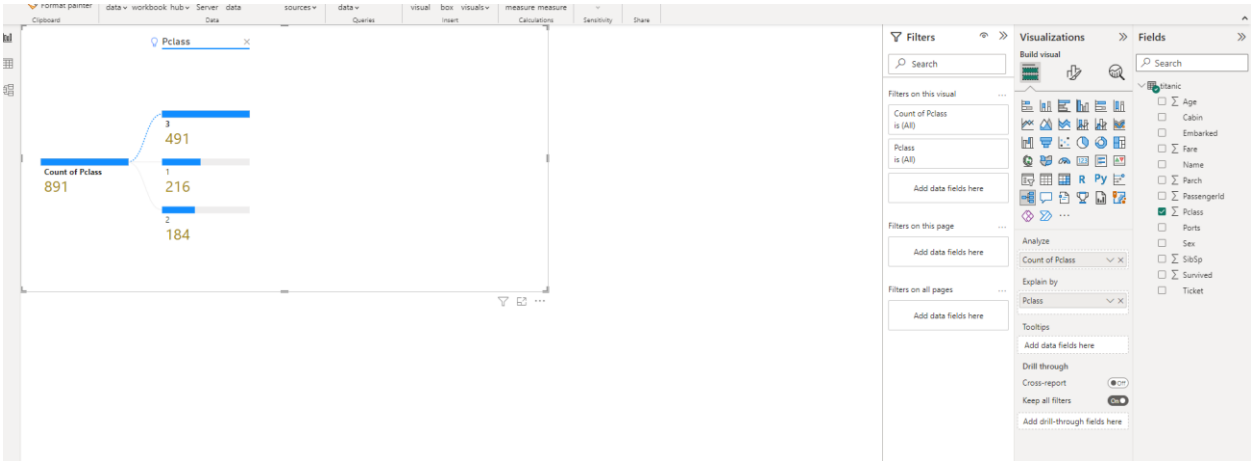
Select map!!



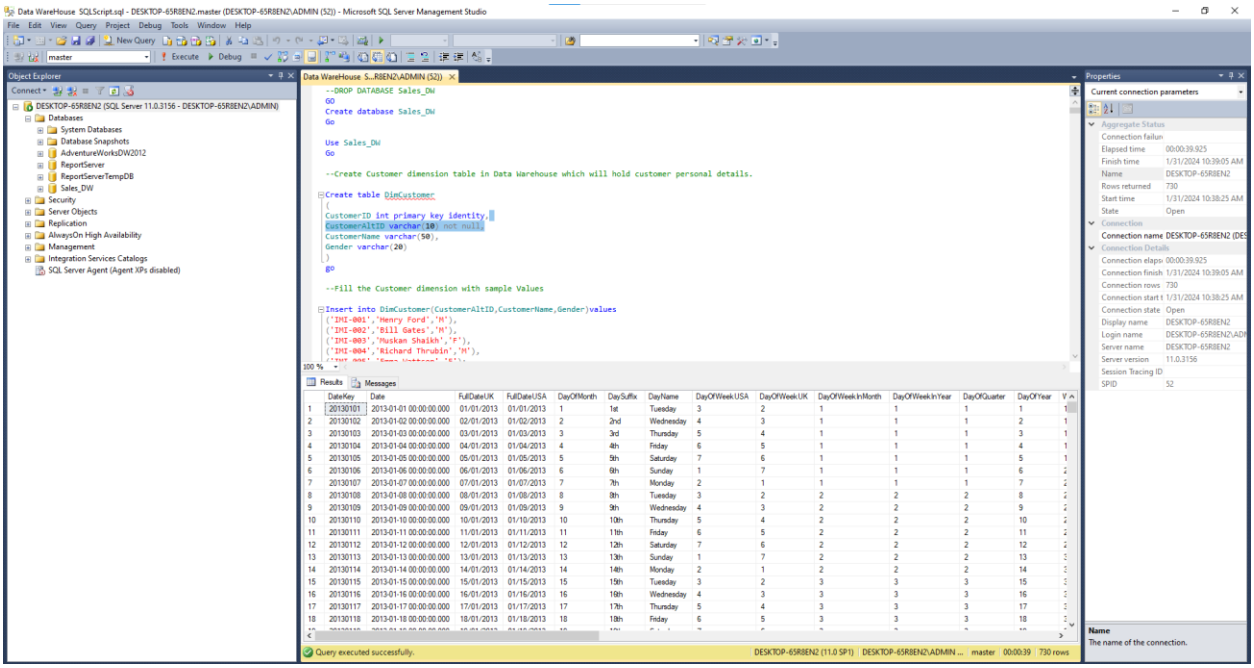

Ticket!!!

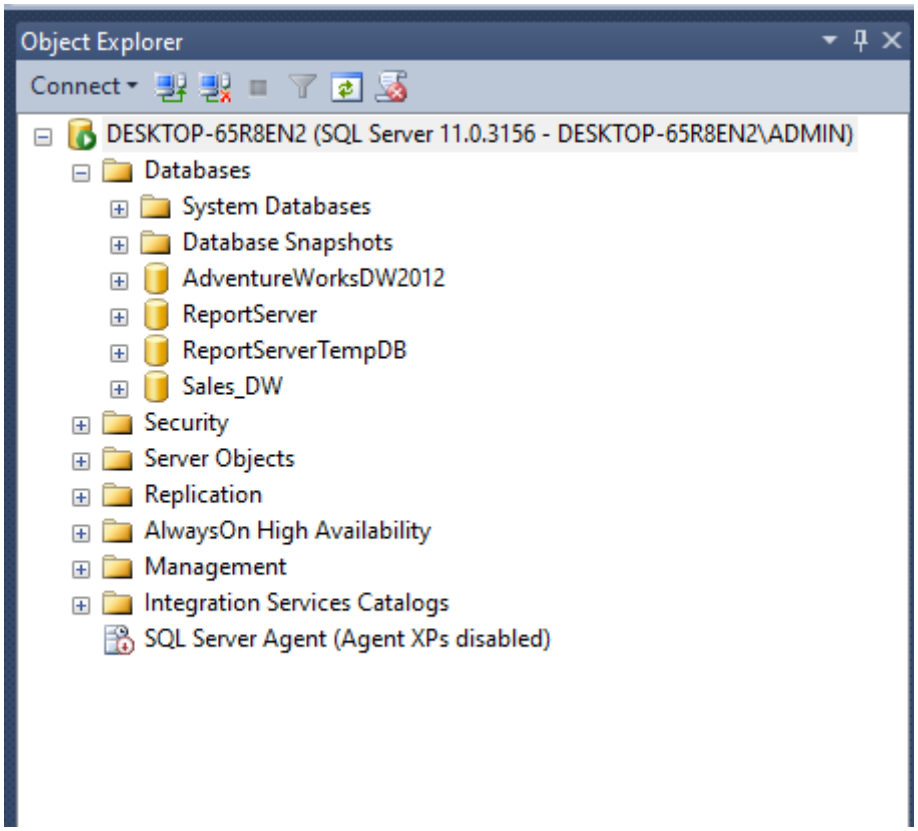
Decomposition Tree

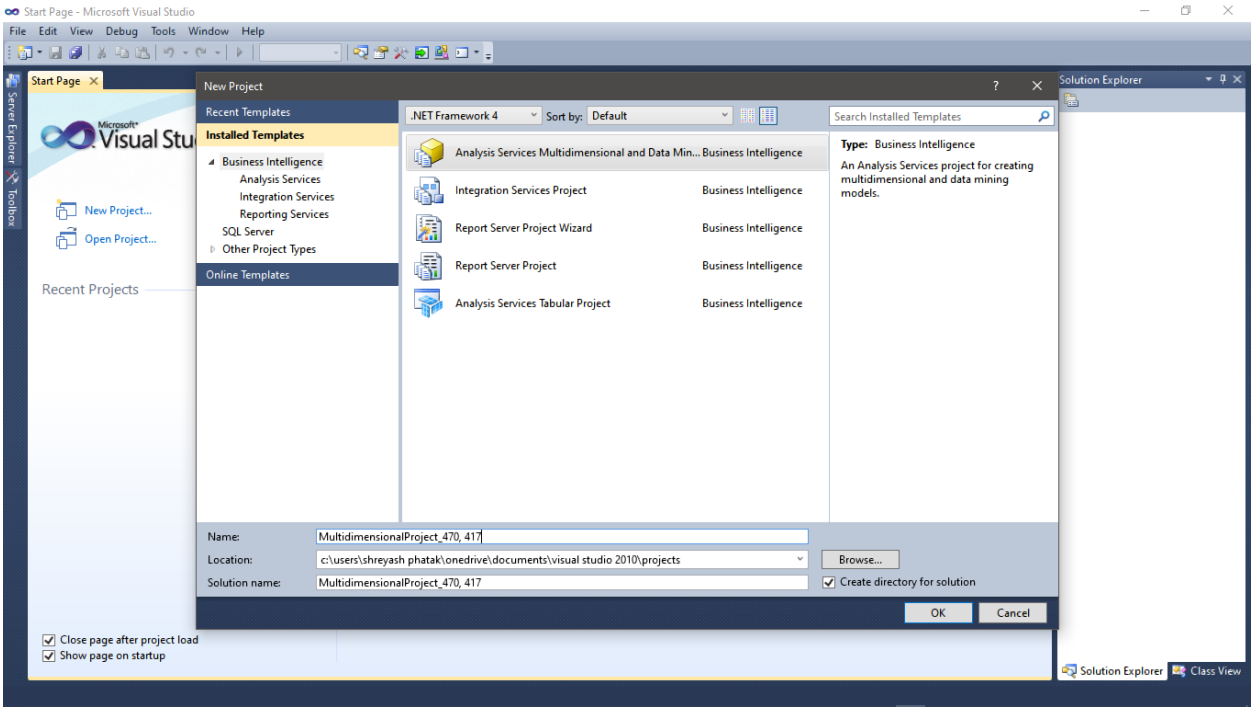


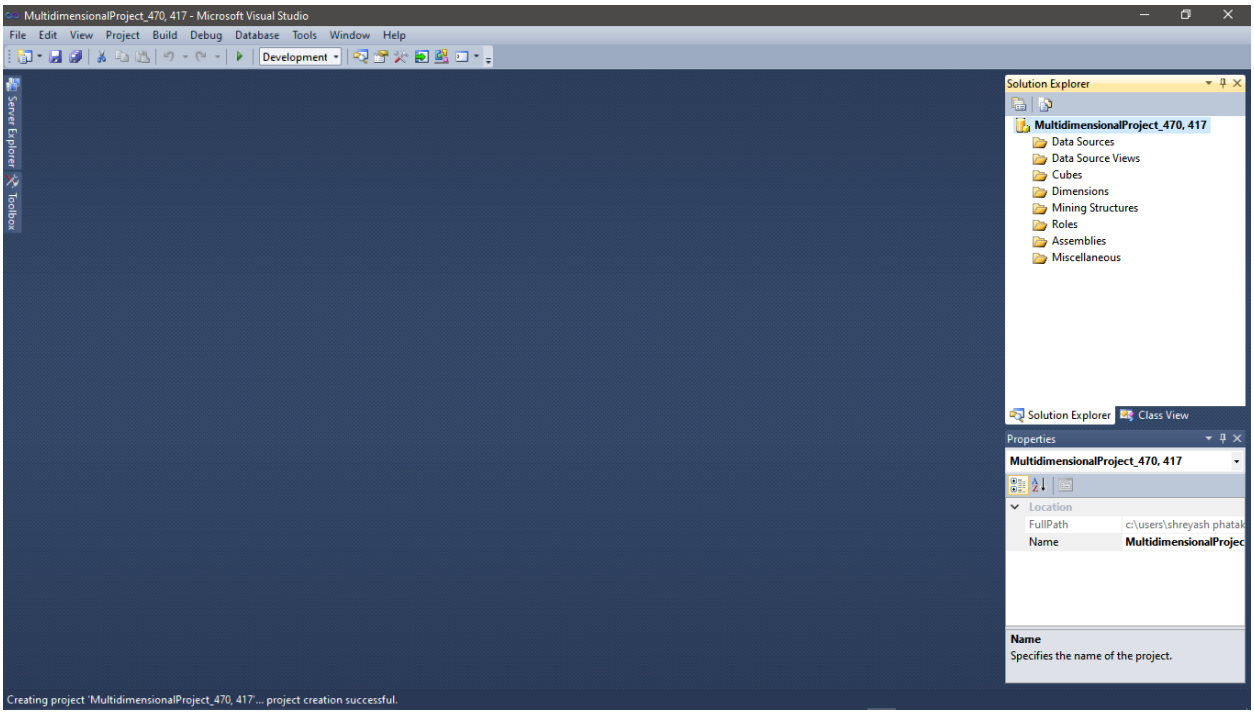
# Practical 3

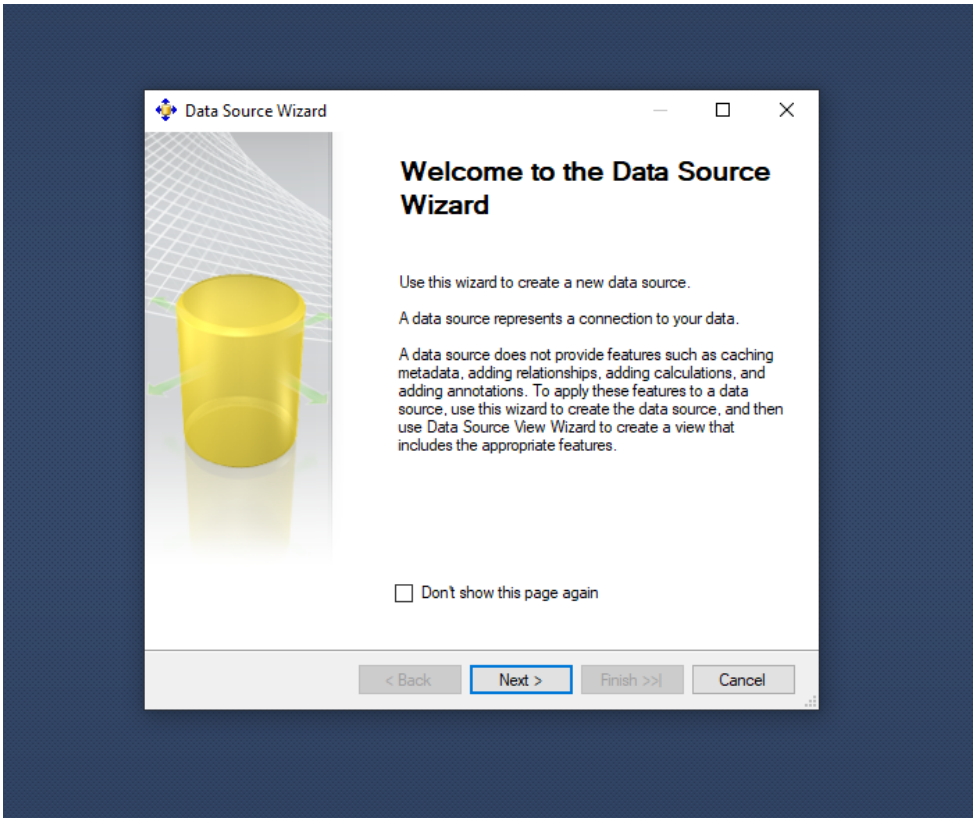
Shreyash Phatak 470

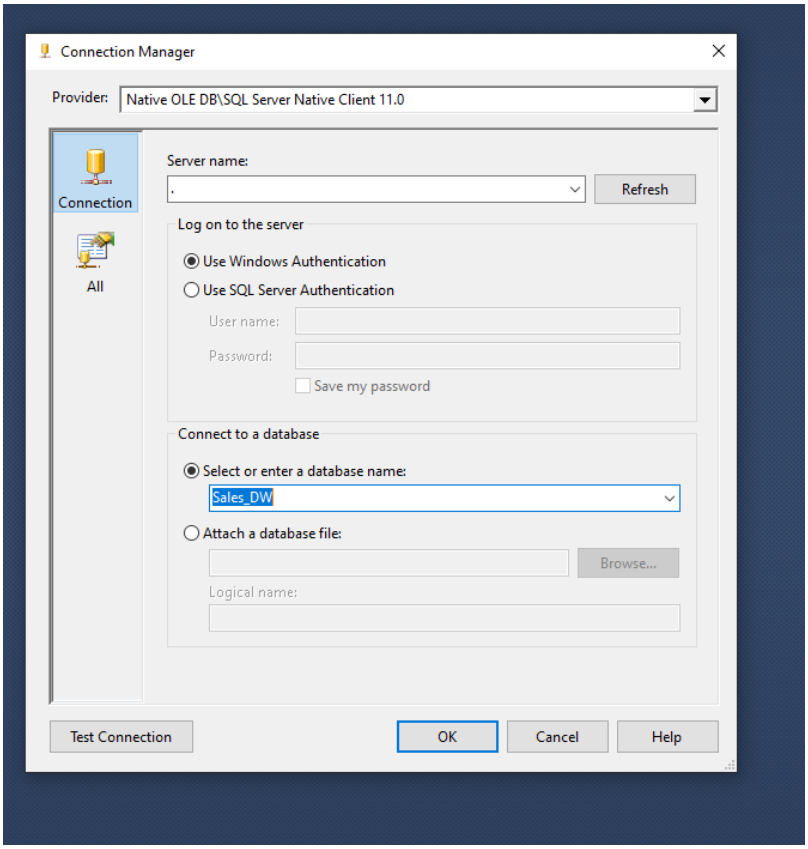


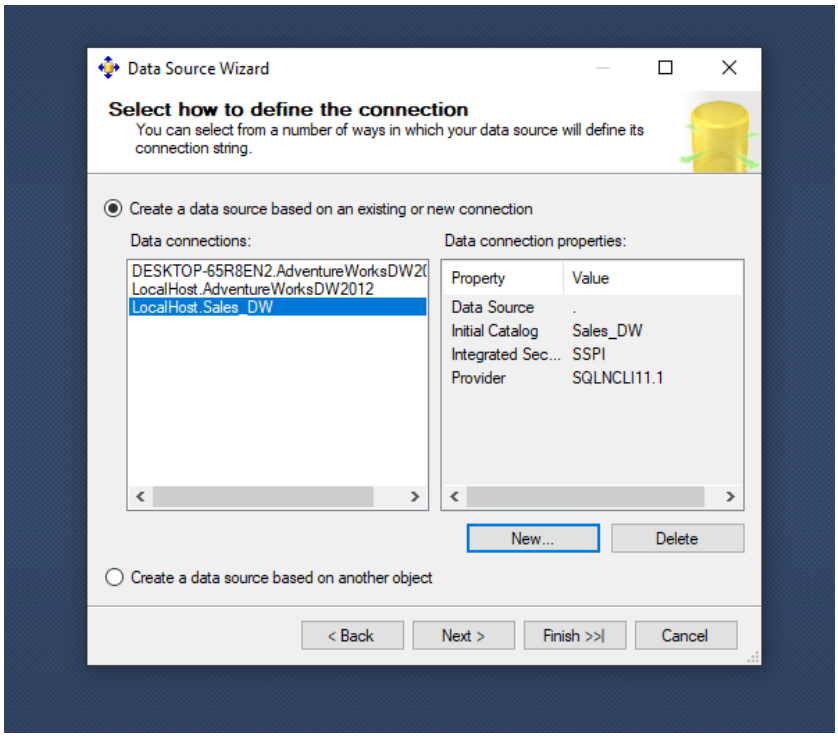



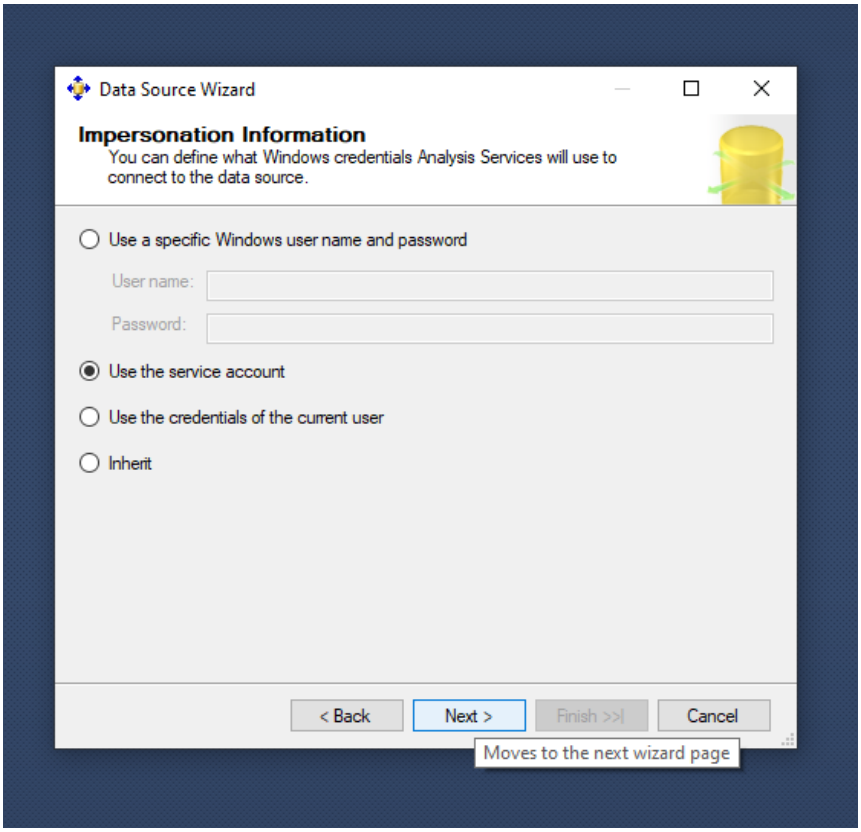

Start Page - Microsoft Visual Studio
File Edit View Debug Tools Window Help
Start Page
New Project
Recent Templates
Installed Templates
Business Intelligence
Analysis Services
Integration Services
Reporting Services
SQL Server
Other Project Types
Online Templates
.NET Framework 4
Sort by: Default
Search Installed Templates
Analysis Services Multidimensional and Data Min... Business Intelligence
Integration Services Project Business Intelligence
Report Server Project Wizard Business Intelligence
Report Server Project Business Intelligence
Analysis Services Tabular Project Business Intelligence
Type: Business Intelligence
An Analysis Services project for creating multidimensional and data mining models.
Name: MultidimensionalProject_470, 417
Location: c:\users\shreyash phatak\onedrive\documents\visual studio 2010\projects
Browse...
Solution name: MultidimensionalProject_470, 417
Create directory for solution
OK
Cancel
New Project...
Open Project...
Recent Projects
Close page after project load
Show page on startup
Solution Explorer
Class View

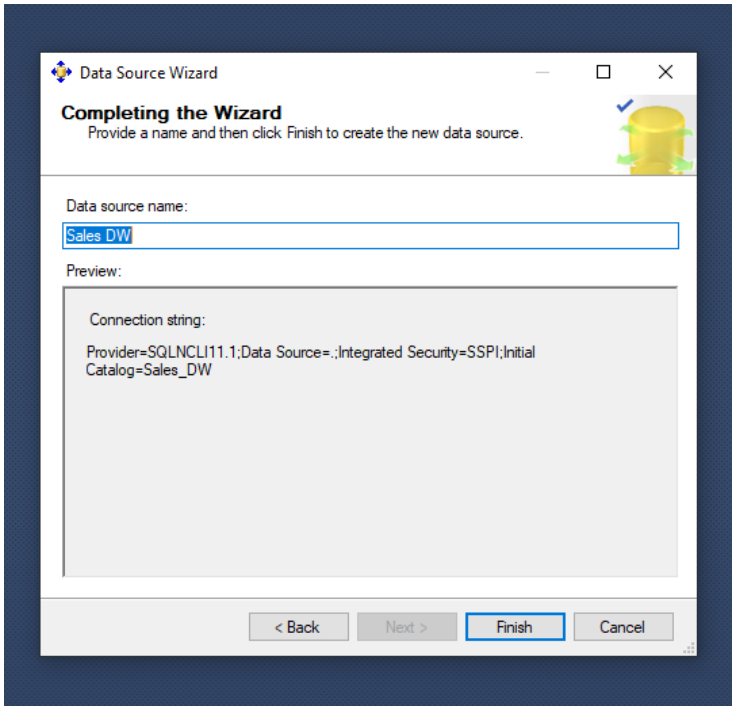

MultidimensionalProject_470, 417 - Microsoft Visual Studio
File Edit View Project Build Debug Database Tools Window Help
Development
Solution Explorer
MultidimensionalProject_470, 417
Data Sources
Data Source Views
Cubes
Dimensions
Mining Structures
Roles
Assemblies
Miscellaneous
Solution Explorer
Class View
Properties
MultidimensionalProject_470, 417
Location
FullPath
Name
Name
Specifies the name of the project.
Creating project 'MultidimensionalProject_470, 417'... project creation successful.

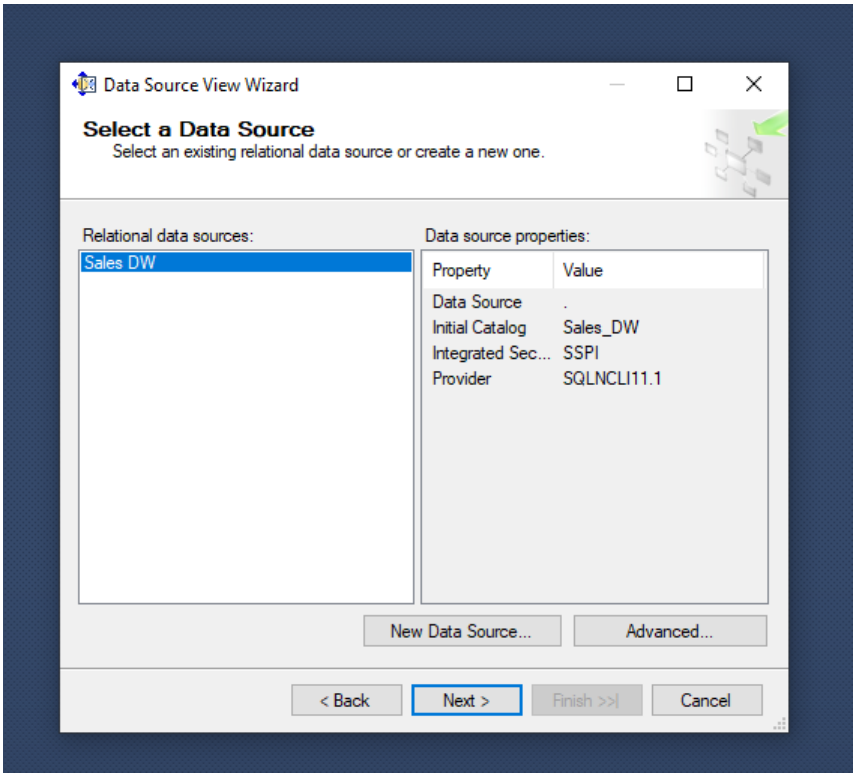

Data Source Wizard
Welcome to the Data Source Wizard
Use this wizard to create a new data source.
A data source represents a connection to your data.
A data source does not provide features such as caching metadata, adding relationships, adding calculations, and adding annotations. To apply these features to a data source, use this wizard to create the data source, and then use Data Source View Wizard to create a view that includes the appropriate features.
Don't show this page again
< Back
Next >
Finish >>|
Cancel

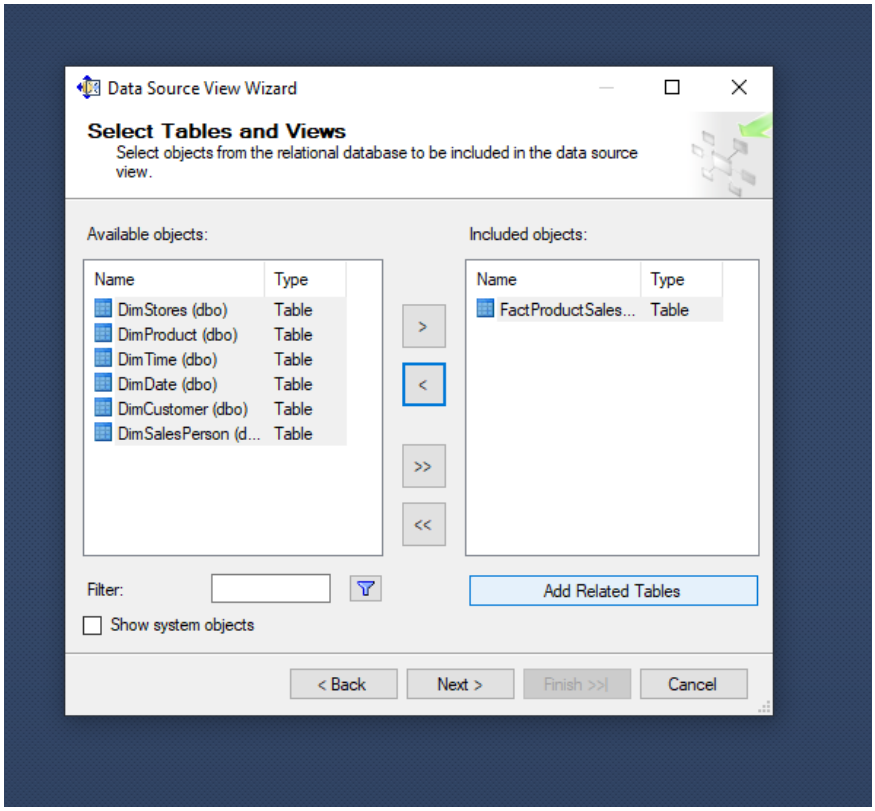

Connection Manager
Provider:
Native OLE DB\SQL Server Native Client 11.0
Connection
All
Server name:
.
Refresh
Log on to the server
Use Windows Authentication
Use SQL Server Authentication
User name:
Password:
Save my password
Connect to a database
Select or enter a database name:
Sales_DW
Attach a database file:
Browse...
Logical name:
Test Connection
OK
Cancel
Help

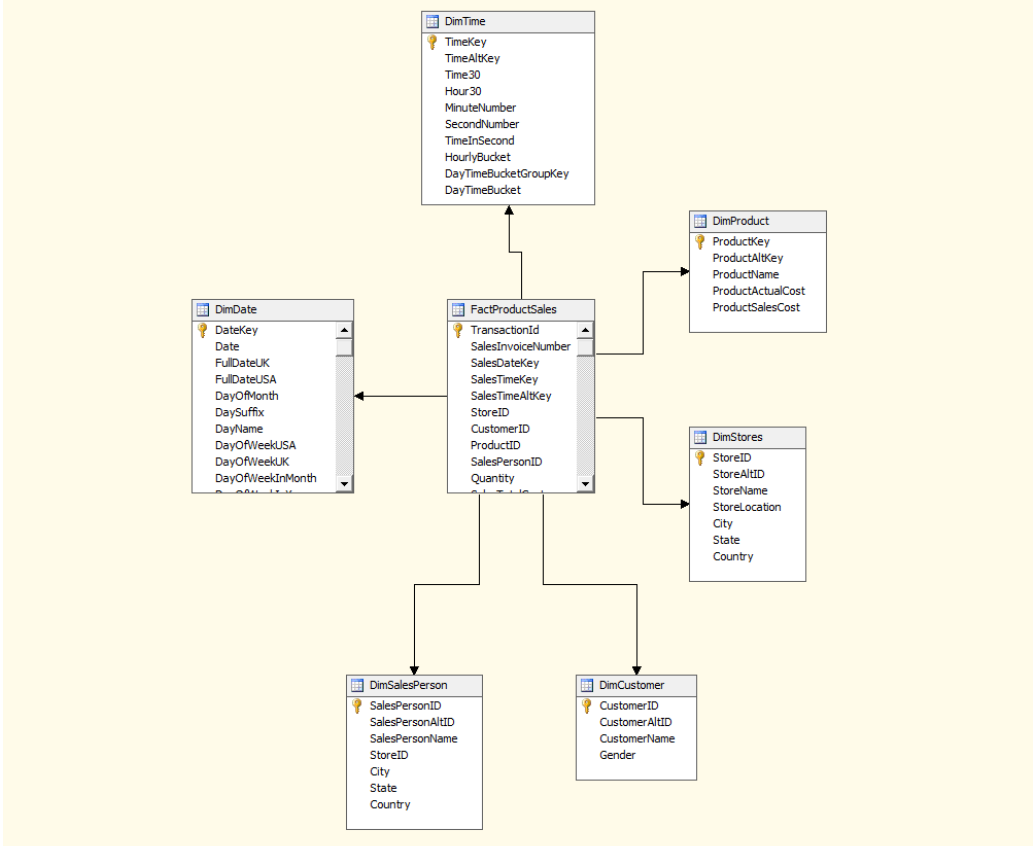

Data Source Wizard
Select how to define the connection
You can select from a number of ways in which your data source will define its connection string.
Create a data source based on an existing or new connection
Data connections:
DESKTOP-65R8EN2.AdventureWorksDW2(
LocalHost.AdventureWorksDW2012
LocalHost.Sales_DW
Data connection properties:
Property
Value
Data Source .
Initial Catalog Sales_DW
Integrated Sec... SSPI
Provider SQLNCLI11.1
New...
Delete
Create a data source based on another object
< Back
Next >
Finish >>|
Cancel

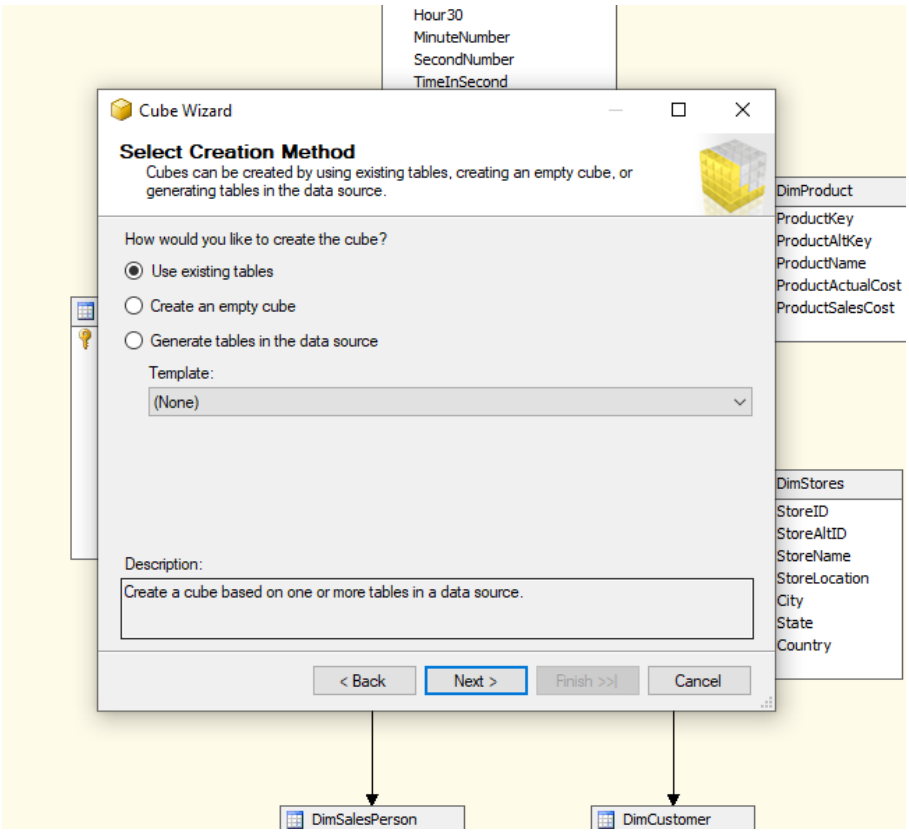

Data Source Wizard
Impersonation Information
You can define what Windows credentials Analysis Services will use to connect to the data source.
Use a specific Windows user name and password
User name:
Password:
Use the service account
Use the credentials of the current user
Inherit
< Back
Next >
Finish >>|
Cancel
Moves to the next wizard page

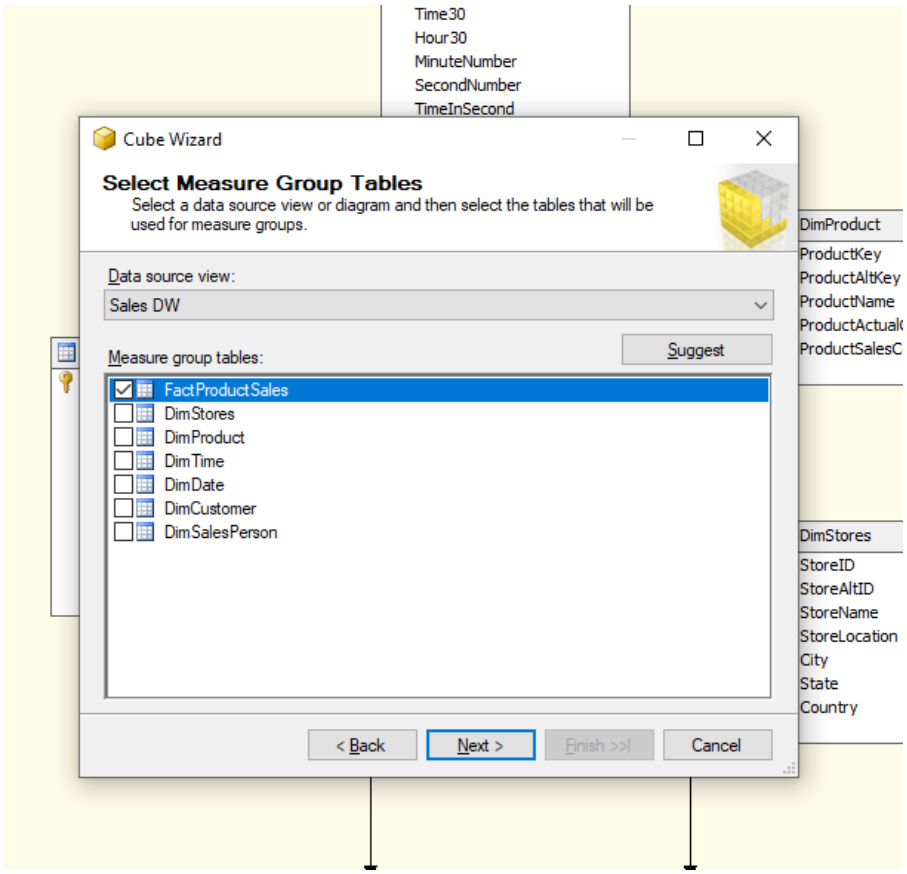

Data Source Wizard
Completing the Wizard
Provide a name and then click Finish to create the new data source.
Data source name:
Sales DW
Preview:
Connection string:
Provider=SQLNCLI11.1;Data Source=.;Integrated Security=SSPI;Initial Catalog=Sales_DW
< Back
Next >
Finish
Cancel

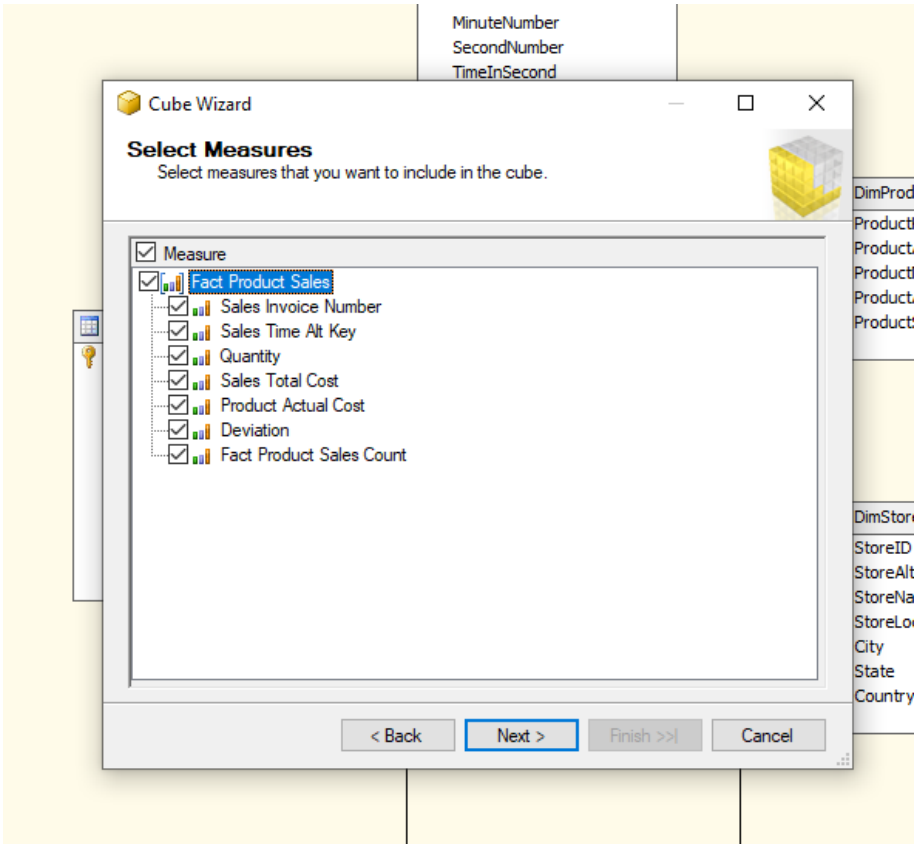

Data Source View Wizard
Select a Data Source
Select an existing relational data source or create a new one.
Relational data sources:
Sales DW
Data source properties:
Property
Value
Data Source .
Initial Catalog Sales_DW
Integrated Sec... SSPI
Provider SQLNCLI11.1
New Data Source...
Advanced...
< Back
Next >
Finish >>|
Cancel

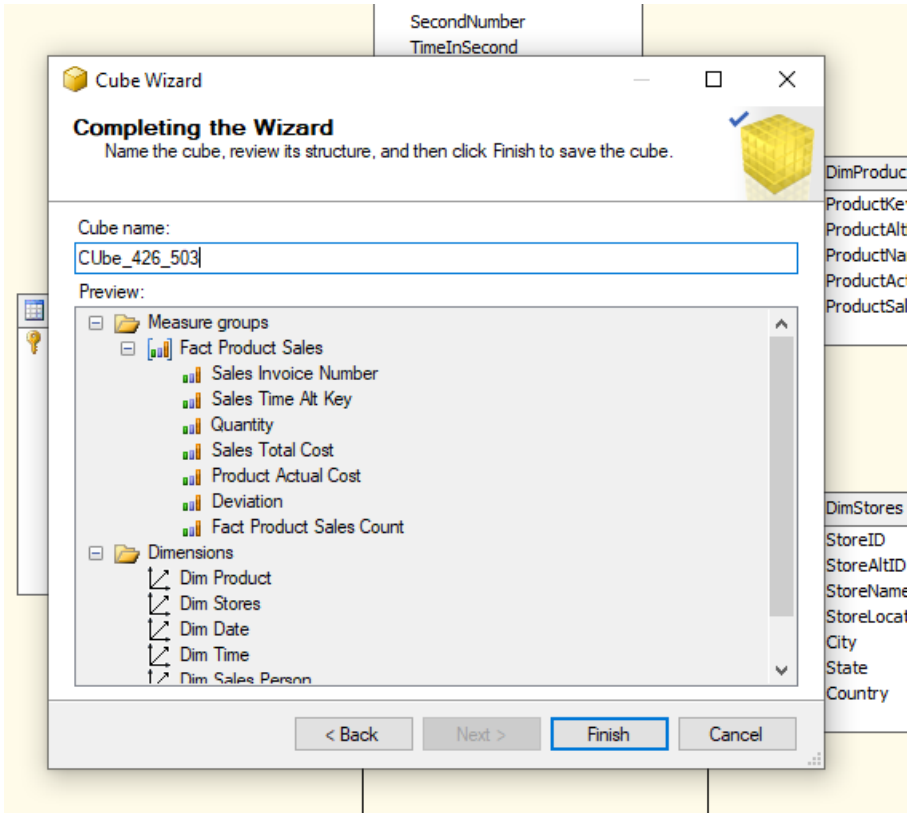

Data Source View Wizard
Select Tables and Views
Select objects from the relational database to be included in the data source view.
Available objects:
Name
Type
DimStores (dbo)
Table
DimProduct (dbo)
Table
DimTime (dbo)
Table
DimDate (dbo)
Table
DimCustomer (dbo)
Table
DimSalesPerson (d...
Table
>
<
>>
<<
Included objects:
Name
Type
FactProductSales...
Table
Filter:
Add Related Tables
Show system objects
< Back
Next >
Finish >>|
Cancel

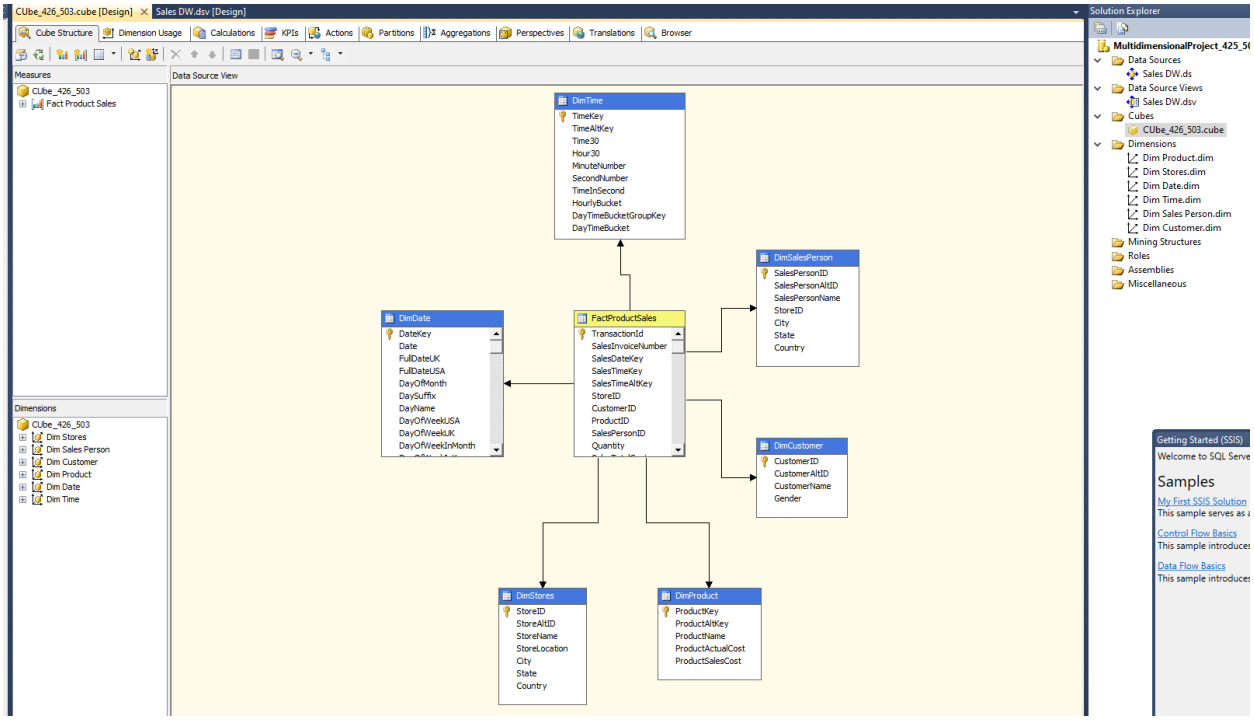

DimTime
TimeKey
TimeAltKey
Time30
Hour30
MinuteNumber
SecondNumber
TimeInSecond
HourlyBucket
DayTimeBucketGroupKey
DayTimeBucket
DimProduct
ProductKey
ProductAltKey
ProductName
ProductActualCost
ProductSalesCost
DimDate
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekInMonth
FactProductSales
TransactionId
SalesInvoiceNumber
SalesDateKey
SalesTimeKey
SalesTimeAltKey
StoreID
CustomerID
ProductID
SalesPersonID
Quantity
DimStores
StoreID
StoreAltID
StoreName
StoreLocation
City
State
Country
DimSalesPerson
SalesPersonID
SalesPersonAltID
SalesPersonName
StoreID
City
State
Country
DimCustomer
CustomerID
CustomerAltID
CustomerName
Gender

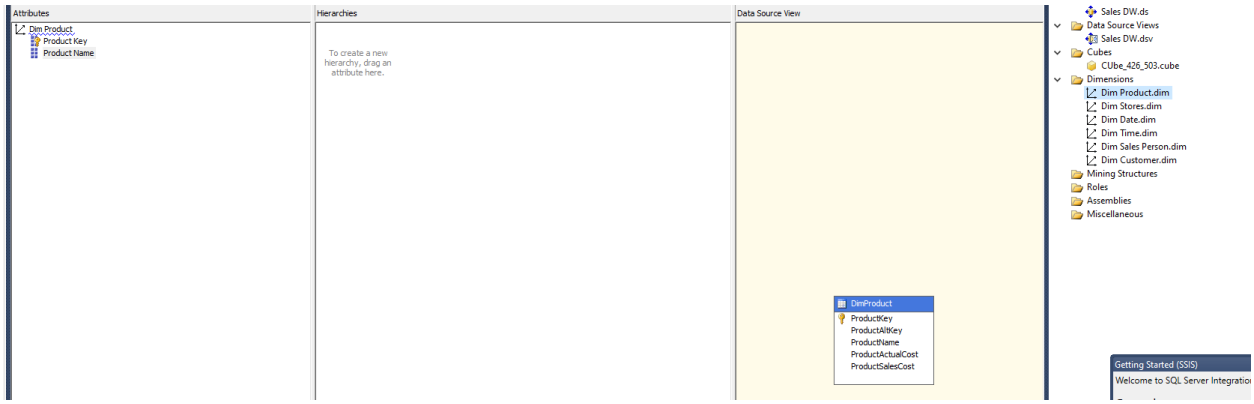

Hour30
MinuteNumber
SecondNumber
TimeInSecond
Cube Wizard
Select Creation Method
Cubes can be created by using existing tables, creating an empty cube, or generating tables in the data source.
How would you like to create the cube?
Use existing tables
Create an empty cube
Generate tables in the data source
Template:
(None)
Description:
Create a cube based on one or more tables in a data source.
< Back
Next >
Finish >>|
Cancel
DimProduct
ProductKey
ProductAltKey
ProductName
ProductActualCost
ProductSalesCost
DimStores
StoreID
StoreAltID
StoreName
StoreLocation
City
State
Country
DimSalesPerson
DimCustomer

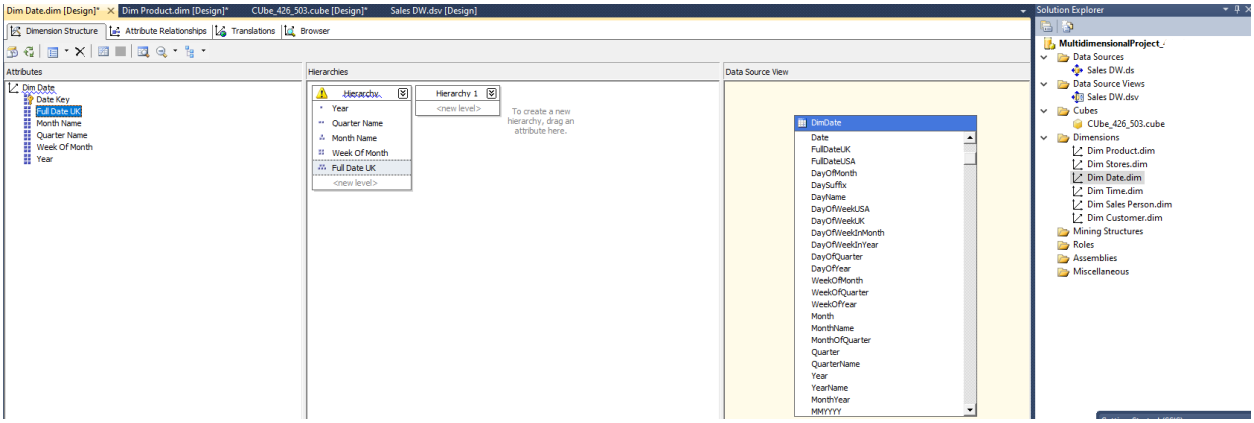

Time30
Hour30
MinuteNumber
SecondNumber
TimeInSecond
Cube Wizard
Select Measure Group Tables
Select a data source view or diagram and then select the tables that will be used for measure groups.
Data source view:
Sales DW
Measure group tables:
Suggest
FactProductSales
DimStores
DimProduct
DimTime
DimDate
DimCustomer
DimSalesPerson
< Back
Next >
Finish >>|
Cancel
DimProduct
ProductKey
ProductAltKey
ProductName
DimStores
StoreID
StoreAltID
StoreName
StoreLocation
City
State
Country

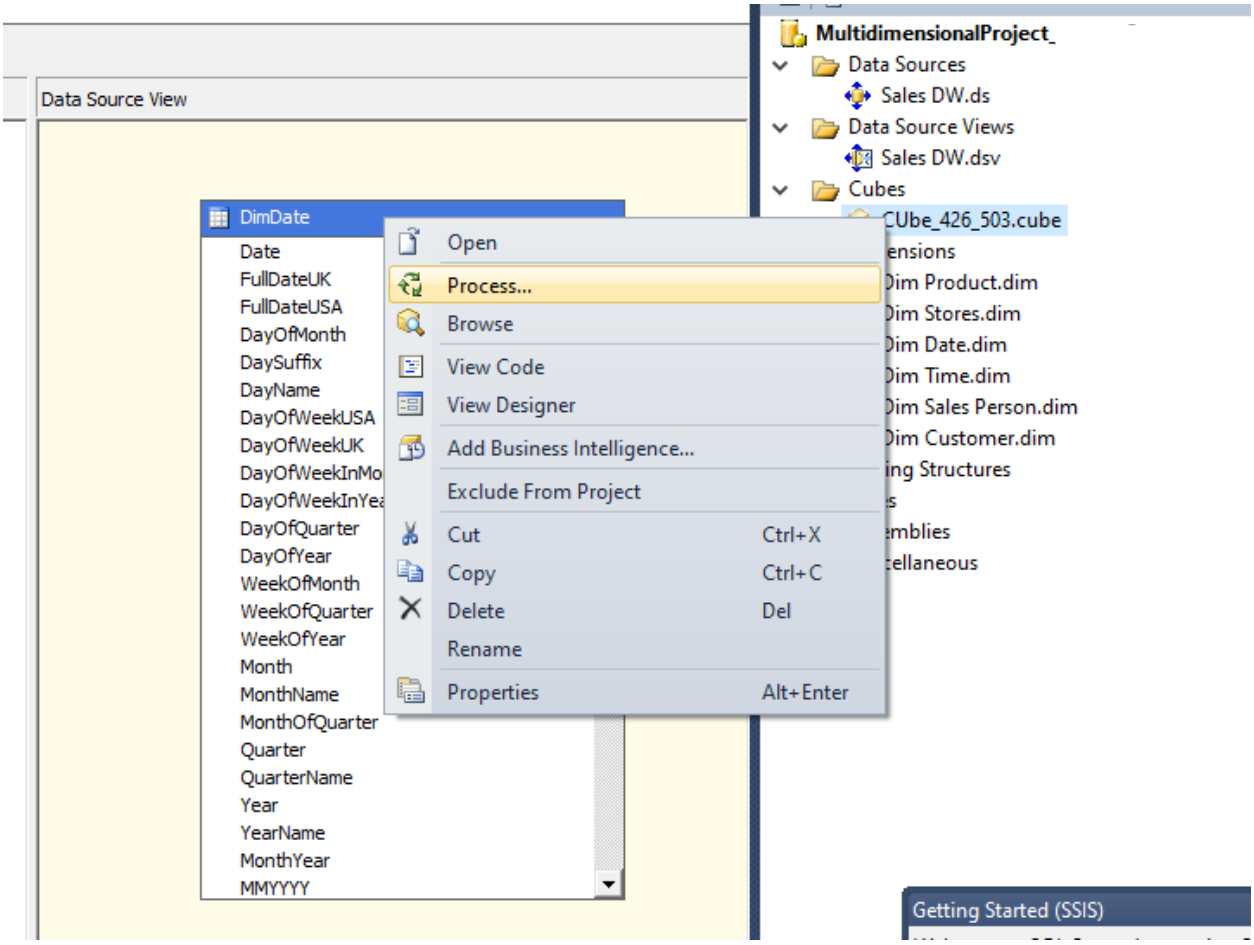

MinuteNumber
SecondNumber
TimeInSecond
Cube Wizard
Select Measures
Select measures that you want to include in the cube.
Measure
Fact Product Sales
Sales Invoice Number
Sales Time Alt Key
Quantity
Sales Total Cost
Product Actual Cost
Deviation
Fact Product Sales Count
< Back
Next >
Finish >>|
Cancel
DimProd
DimStor
StoreID
City
State
Country

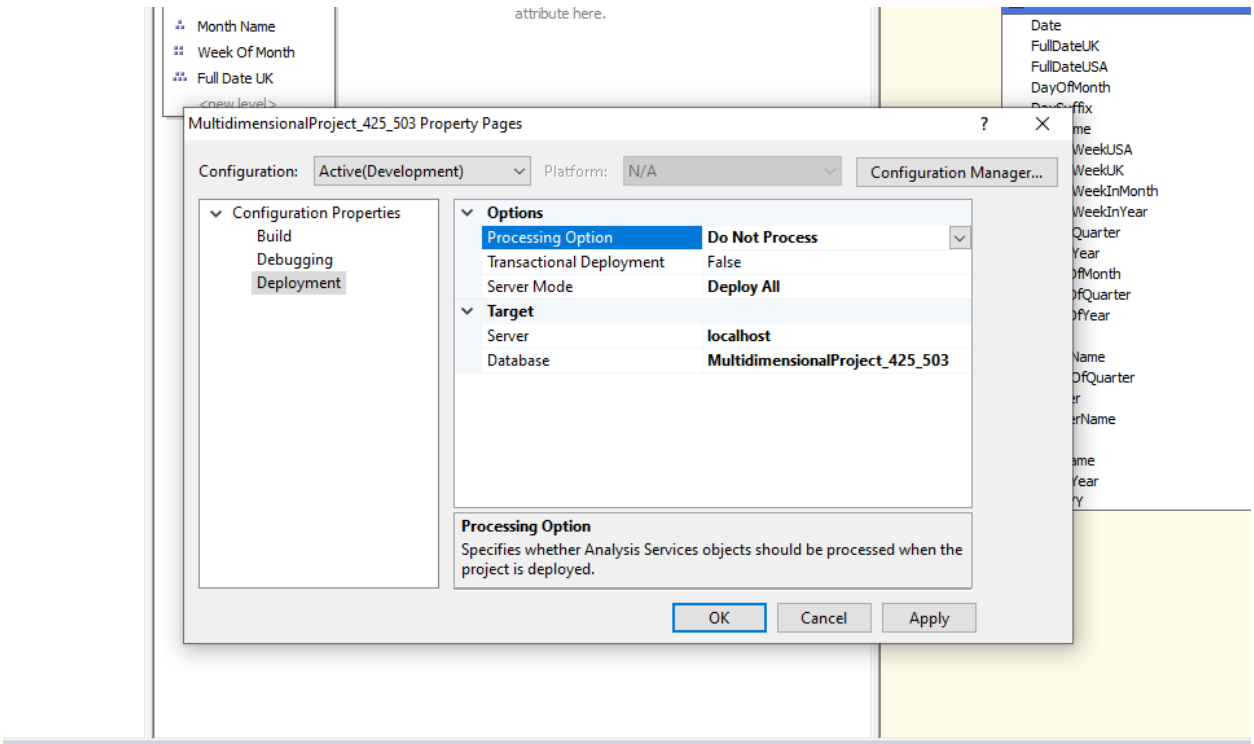

SecondNumber
TimeInSecond
Cube Wizard
Completing the Wizard
Name the cube, review its structure, and then click Finish to save the cube.
Cube name:
CUbe_426_503
Preview:
Measure groups
Fact Product Sales
Sales Invoice Number
Sales Time Alt Key
Quantity
Sales Total Cost
Product Actual Cost
Deviation
Fact Product Sales Count
Dimensions
Dim Product
Dim Stores
Dim Date
Dim Time
< Back
Next >
Finish
Cancel
DimProduc
DimStores
StoreID
StoreAltID
City
State
Country

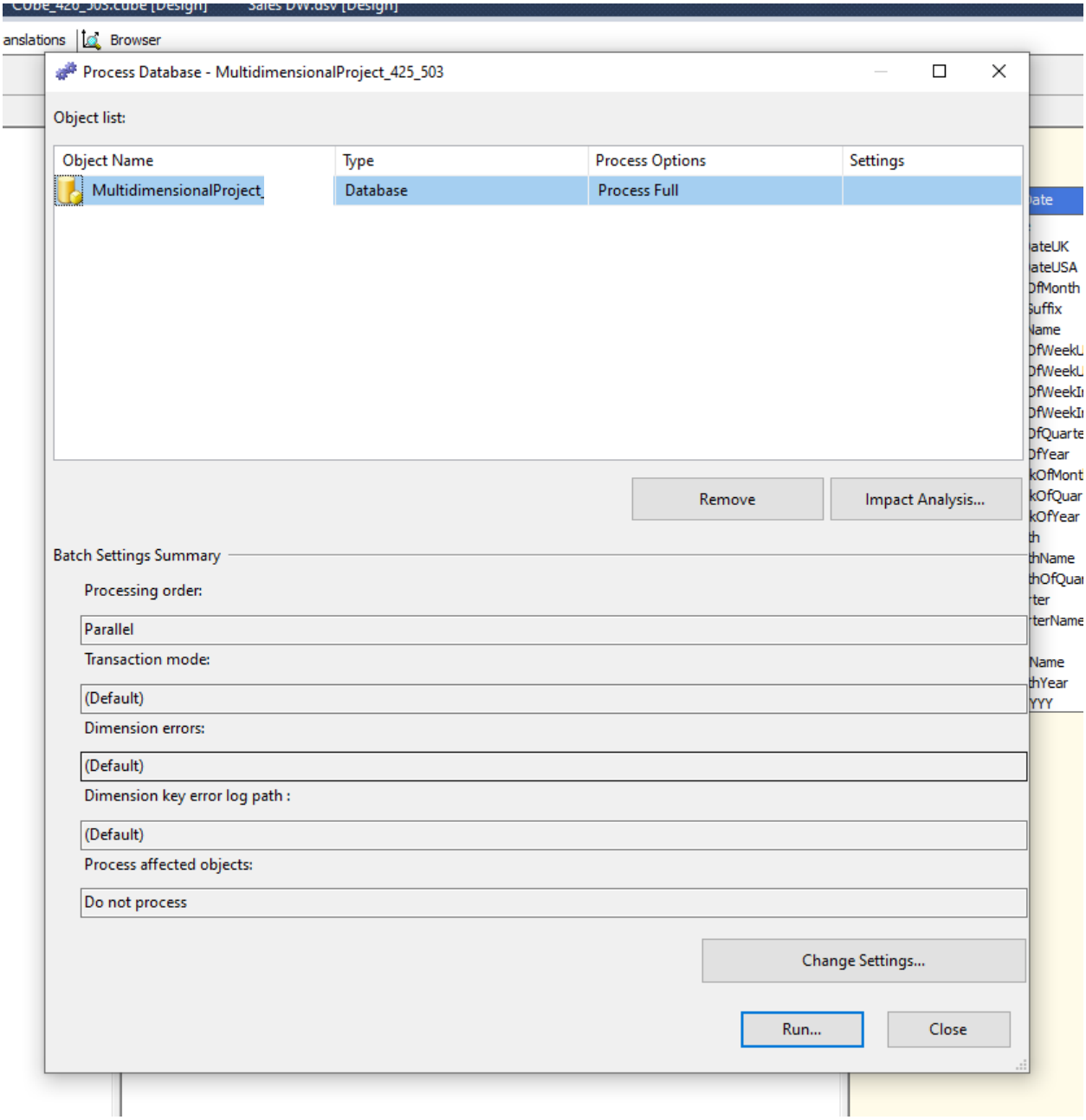

CUbe_426_503.cube [Design]
Sales DW.dsv [Design]
Cube Structure
Dimension Usage
Calculations
KPIs
Actions
Partitions
Aggregations
Perspectives
Translations
Browser
Measures
CUbe_426_503
Fact Product Sales
Dimensions
CUbe_426_503
Dim Stores
Dim Sales Person
Dim Customer
Dim Product
Dim Date
Dim Time
Data Source View
DimTime
TimeKey
TimeAltKey
Time30
Hour30
MinuteNumber
SecondNumber
TimeInSecond
HourlyBucket
DayTimeBucketGroupKey
DayTimeBucket
DimSalesPerson
SalesPersonID
SalesPersonAltID
SalesPersonName
StoreID
City
State
Country
DimDate
DateKey
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekInMonth
FactProductSales
TransactionId
SalesInvoiceNumber
SalesDateKey
SalesTimeKey
SalesTimeAltKey
StoreID
CustomerID
ProductID
SalesPersonID
Quantity
DimCustomer
CustomerID
CustomerAltID
CustomerName
Gender
DimStores
StoreID
StoreAltID
StoreName
StoreLocation
City
State
Country
DimProduct
ProductKey
ProductAltKey
ProductName
ProductActualCost
ProductSalesCost
Solution Explorer
MultidimensionalProject_425_5
Data Sources
Sales DW.ds
Data Source Views
Sales DW.dsv
Cubes
CUbe_426_503.cube
Dimensions
Dim Product.dim
Dim Stores.dim
Dim Date.dim
Dim Time.dim
Dim Sales Person.dim
Dim Customer.dim
Mining Structures
Roles
Assemblies
Miscellaneous
Getting Started (SSIS)
Welcome to SQL Serve
Samples
My First SSIS Solution
This sample serves as a
Control Flow Basics
This sample introduces
Data Flow Basics
This sample introduces

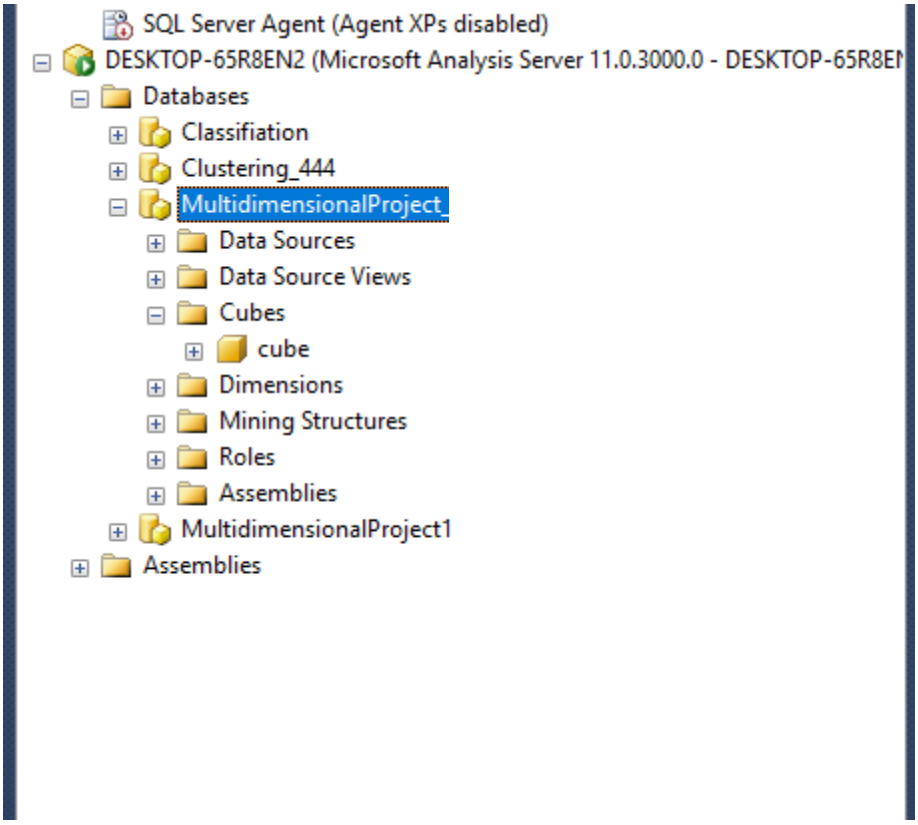

Attributes
Dim Product
Product Key
Product Name
Hierarchies
To create a new hierarchy, drag an attribute here.
Data Source View
DimProduct
ProductKey
ProductAltKey
ProductName
ProductActualCost
ProductSalesCost
Sales DW.ds
Data Source Views
Sales DW.dsv
Cubes
CUbe_426_503.cube
Dimensions
Dim Product.dim
Dim Stores.dim
Dim Date.dim
Dim Time.dim
Dim Sales Person.dim
Dim Customer.dim
Mining Structures
Roles
Assemblies
Miscellaneous
Getting Started (SSIS)


Dim Date.dim [Design]*
Dim Product.dim [Design]*
CUbe_426_503.cube [Design]*
Sales DW.dsv [Design]
Dimension Structure
Attribute Relationships
Translations
Browser
Attributes
Dim Date
Date Key
Full Date UK
Month Name
Quarter Name
Week Of Month
Year
Hierarchies
Hierarchy
Year
Quarter Name
Month Name
Week Of Month
Full Date UK
<new level>
Hierarchy 1
<new level>
To create a new hierarchy, drag an attribute here.
Data Source View
DimDate
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfWeekInMonth
DayOfWeekInYear
DayOfQuarter
DayOfYear
WeekOfMonth
WeekOfQuarter
WeekOfYear
Month
MonthName
MonthOfQuarter
Quarter
QuarterName
Year
YearName
MonthYear
MMYYYY
Solution Explorer
MultidimensionalProject_
Data Sources
Sales DW.ds
Data Source Views
Sales DW.dsv
Cubes
CUbe_426_503.cube
Dimensions
Dim Product.dim
Dim Stores.dim
Dim Date.dim
Dim Time.dim
Dim Sales Person.dim
Dim Customer.dim
Mining Structures
Roles
Assemblies
Miscellaneous


Data Source View
DimDate
Date
FullDateUK
FullDateUSA
DayOfMonth
DaySuffix
DayName
DayOfWeekUSA
DayOfWeekUK
DayOfQuarter
DayOfYear
WeekOfMonth
WeekOfQuarter
WeekOfYear
Month
MonthName
MonthOfQuarter
Quarter
QuarterName
Year
YearName
MonthYear
MMYYYY
Open
Process...
Browse
View Code
View Designer
Add Business Intelligence...
Exclude From Project
Cut Ctrl+X
Copy Ctrl+C
Delete Del
Rename
Properties Alt+Enter
MultidimensionalProject_
Data Sources
Sales DW.ds
Data Source Views
Sales DW.dsv
Cubes
CUbe_426_503.cube
ensions
Dim Product.dim
Dim Stores.dim
Dim Date.dim
Dim Time.dim
Dim Sales Person.dim
Dim Customer.dim
ing Structures
emblies
tellaneous
Getting Started (SSIS)


Month Name
Week Of Month
Full Date UK
attribute here.
MultidimensionalProject_425_503 Property Pages
Configuration: Active(Development)
Platform: N/A
Configuration Manager...
Configuration Properties
Build
Debugging
Deployment
Options
Processing Option Do Not Process
Transactional Deployment False
Server Mode Deploy All
Target
Server localhost
Database MultidimensionalProject_425_503
Processing Option
Specifies whether Analysis Services objects should be processed when the project is deployed.
OK
Cancel
Apply


anslations
Browser
Process Database - MultidimensionalProject_425_503
Object list:
Object Name
Type
Process Options
Settings
MultidimensionalProject_
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


SQL Server Agent (Agent XPs disabled)
DESKTOP-65R8EN2 (Microsoft Analysis Server 11.0.3000.0 - DESKTOP-65R8EN
Databases
Classifiation
Clustering_444
MultidimensionalProject_
Data Sources
Data Source Views
Cubes
cube
Dimensions
Mining Structures
Roles
Assemblies
MultidimensionalProject1
Assemblies