

Name: Yash Kesharwani

Roll no: 3

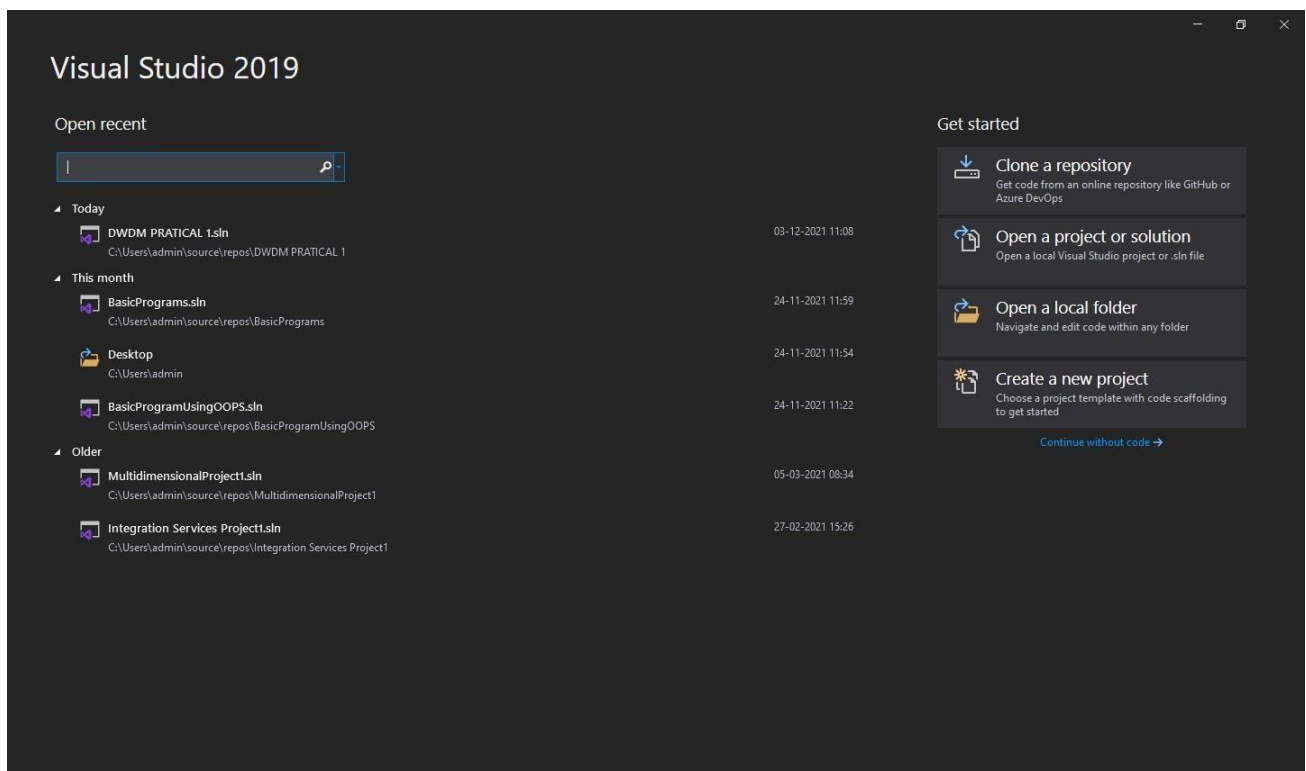
Class: MSc CS Part I

Subject: DWDM

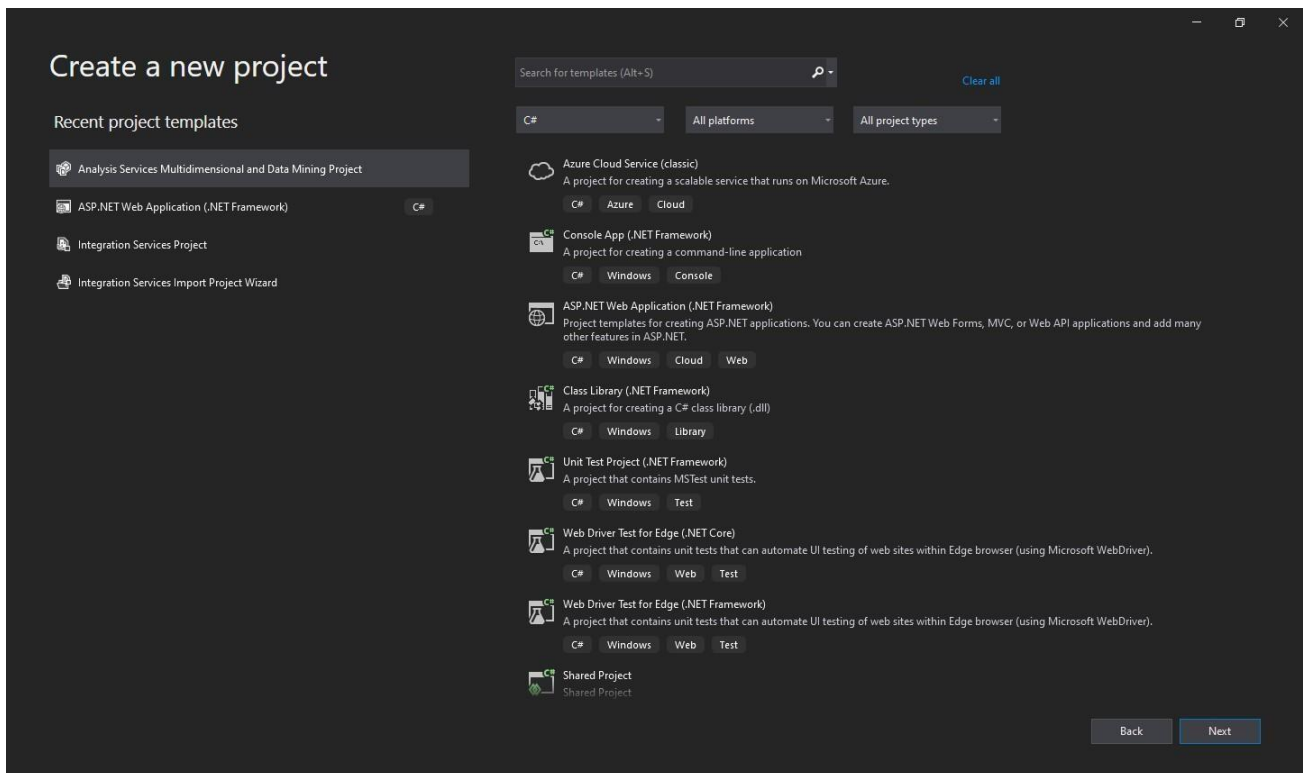
DMDW Practicals

Aim: Perform analysis on Adventure Works dataset using Microsoft Excel and Visual Studio 2019.

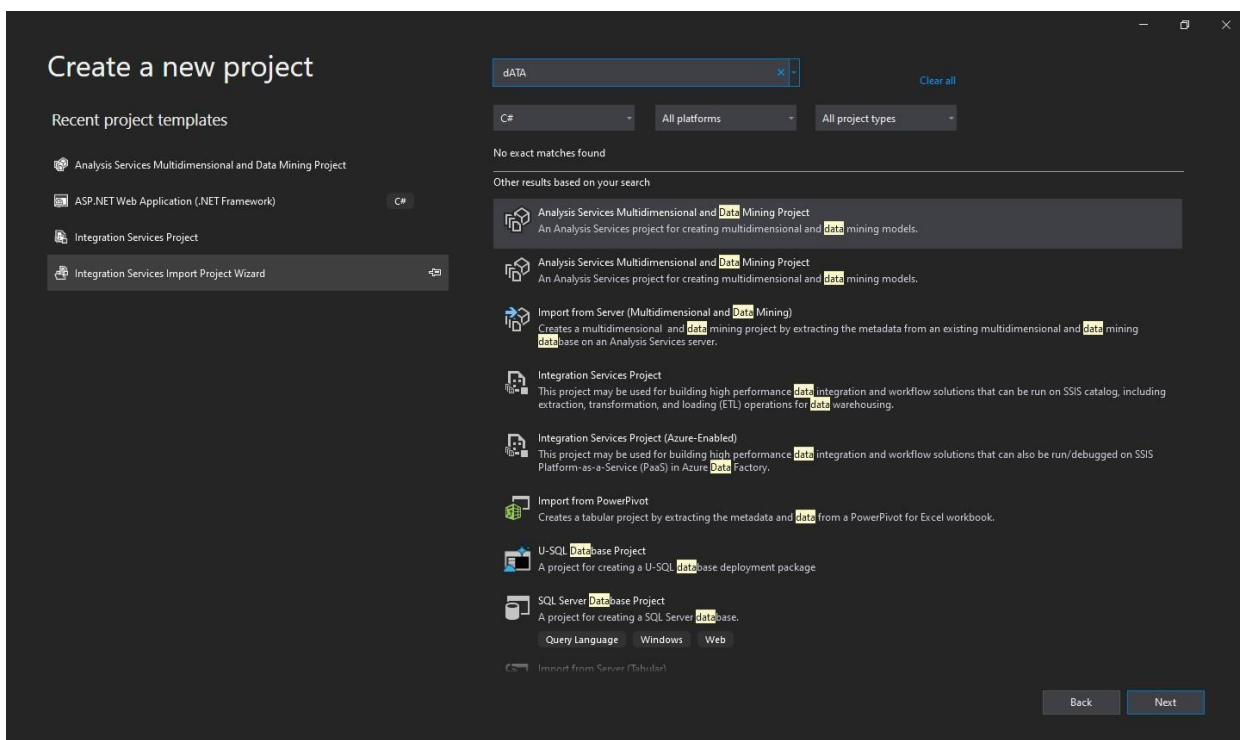
- Open Visual Studio 2019. You should be greeted with this screen.



- Click on the “Create a new project” button present on the right hand side of the screen. The application will now transition to this screen.



- Now, select “Analysis Services Multidimensional and Data Mining Project” button from the ‘Recent Project Templates’ list if present else search for the same using the search bar. You may be prompted to install this package if it is not available locally. Searching for the above template yields this screen:



- Click on “Next”. The screen will now transition to this screen:

The screenshot shows a dark-themed window titled "Configure your new project". Below the title is the subtitle "Analysis Services Multidimensional and Data Mining Project". The form contains the following fields and options:

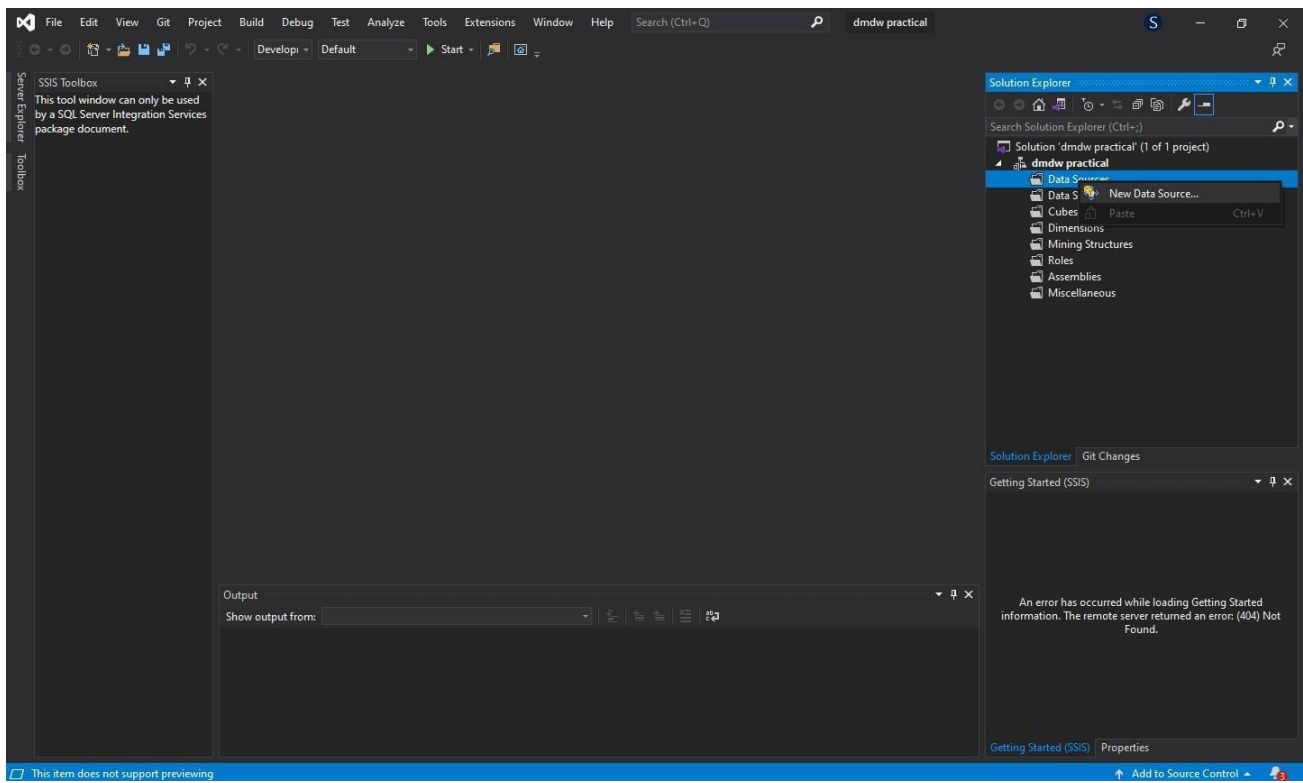
- Project name:** A text box containing "MultidimensionalProject1".
- Location:** A dropdown menu showing "C:\Users\admin\source\repos" with a browse button (three dots) to its right.
- Solution name:** A text box containing "MultidimensionalProject1" with an information icon (i) to its left.
- Checkbox:** An unchecked checkbox labeled "Place solution and project in the same directory".
- Buttons:** "Back" and "Create" buttons at the bottom right.

- You can provide the location of the project as well its name.

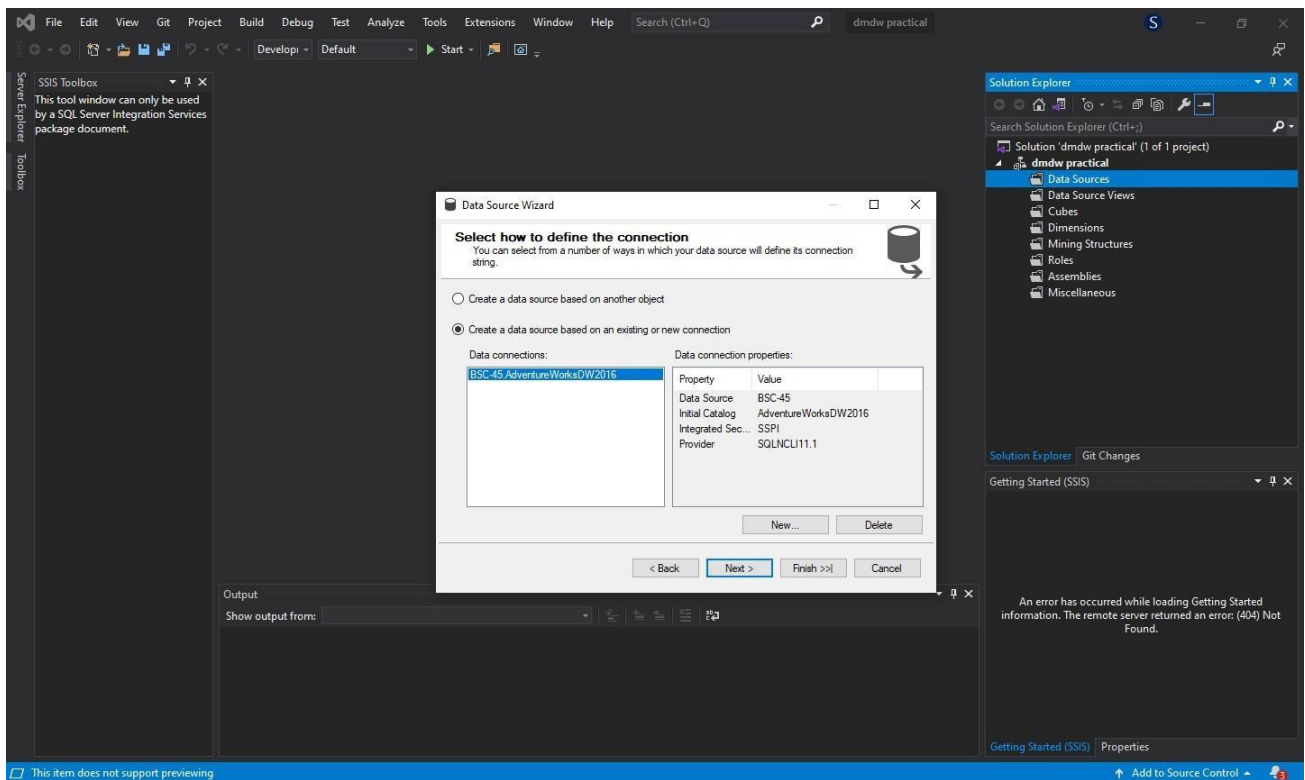
This screenshot shows the same "Configure your new project" dialog box, but with different user input:

- Project name:** The text box now contains "dmdw practical".
- Location:** The dropdown menu now shows "D:\DMDW\" with a browse button (three dots) to its right.
- Solution name:** The text box now contains "dmdw practical" with an information icon (i) to its left.
- Checkbox:** The checkbox labeled "Place solution and project in the same directory" remains unchecked.
- Buttons:** "Back" and "Create" buttons are still present at the bottom right.

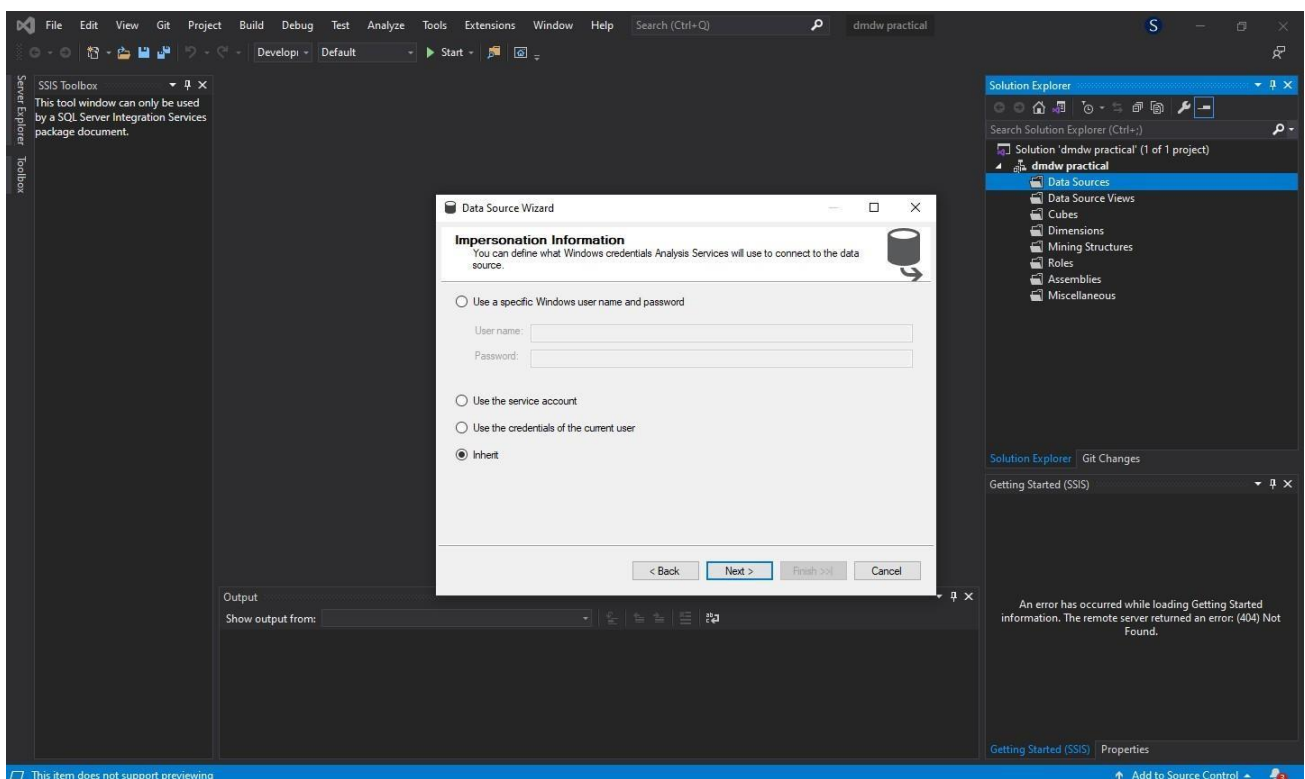
- Click on “Create”. The main window of Visual Studio will be displayed. Now, on the right pane, the child node ‘Data Sources’ can be found. Right click it to get the option “New Data Source”.



- Click on “New Data Source” option. A new window named ‘Data Source Wizard’ will appear. Click on “Next”. Now, the window should transition to the ‘Select how to define the connection’ window. Select the “Create a data source based on new or existing connection”. An entry should now appear in the ‘Data Connections’ and ‘Data Connection Properties’. Select the appropriate connection.

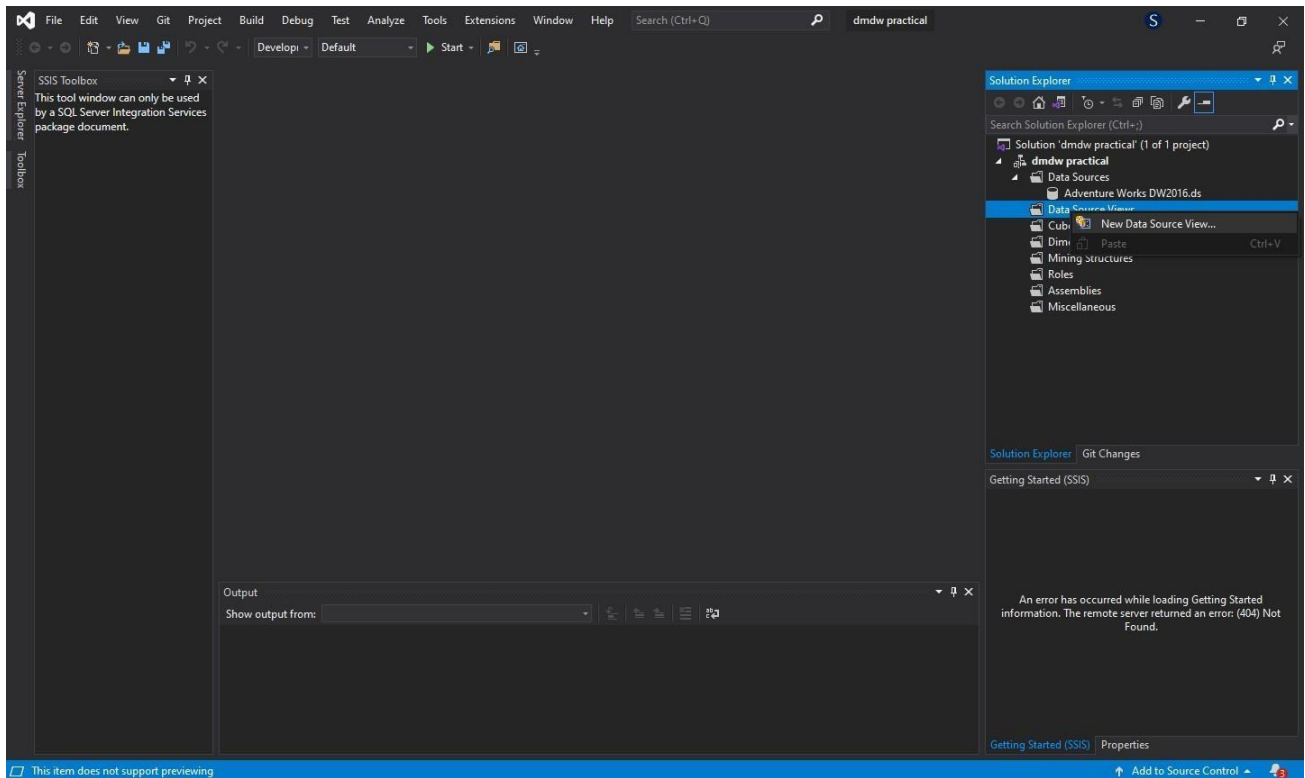


- Click on “Next”. The window will further transition to the ‘Impersonation Information’ window. Select the “Inherit” option.

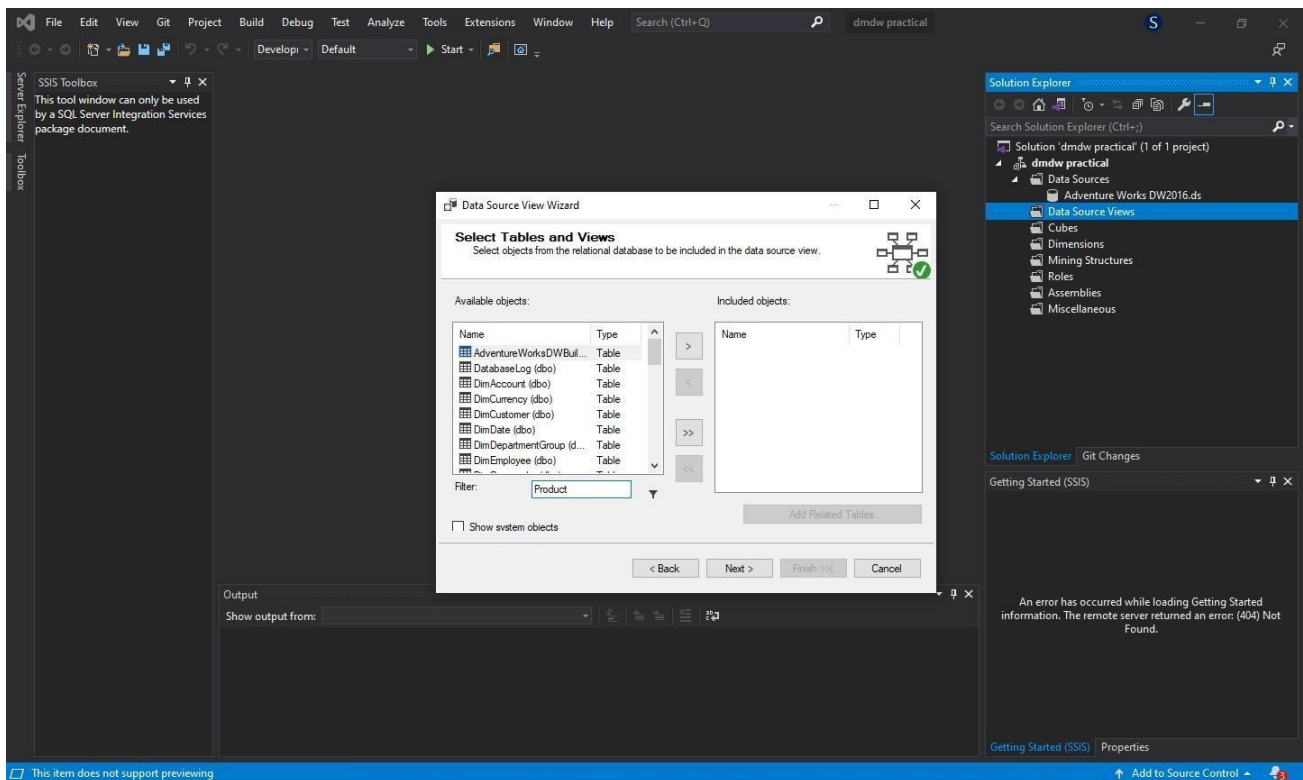


- Click on “Next”. The window will now transition to the last window. Click on “Finish”. The window will now close to reveal a child element in the ‘Data Sources’ tree item. Right click on the ‘Data

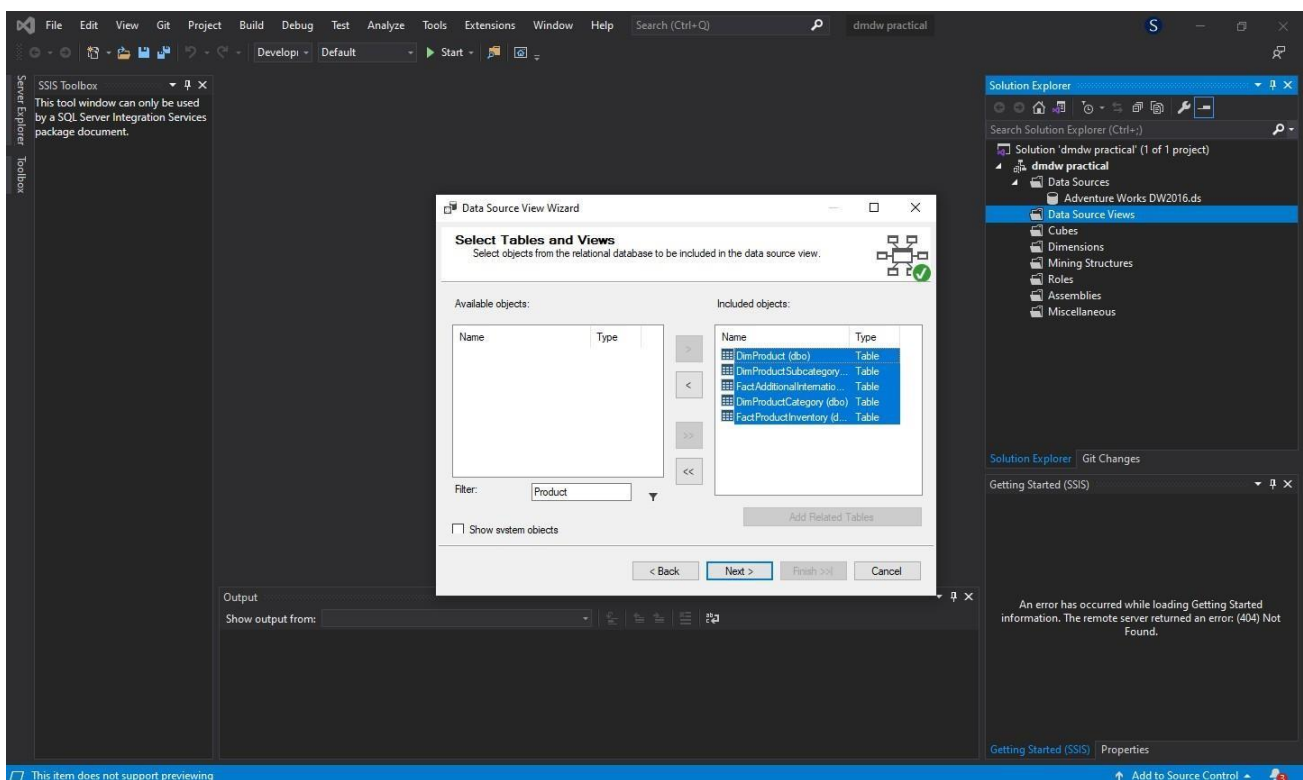
Source Views' tree item present directly below the 'Data Sources' parent node to generate a popup menu with the "New Data Source View" menu item.



- Click "New Data Source View" to create a new window titled 'Data Source View Wizard'. Click on "Next" to transition the window to 'Select Tables and Views' state. Enter a filter of your choice and press the adjoining button to apply the filter.

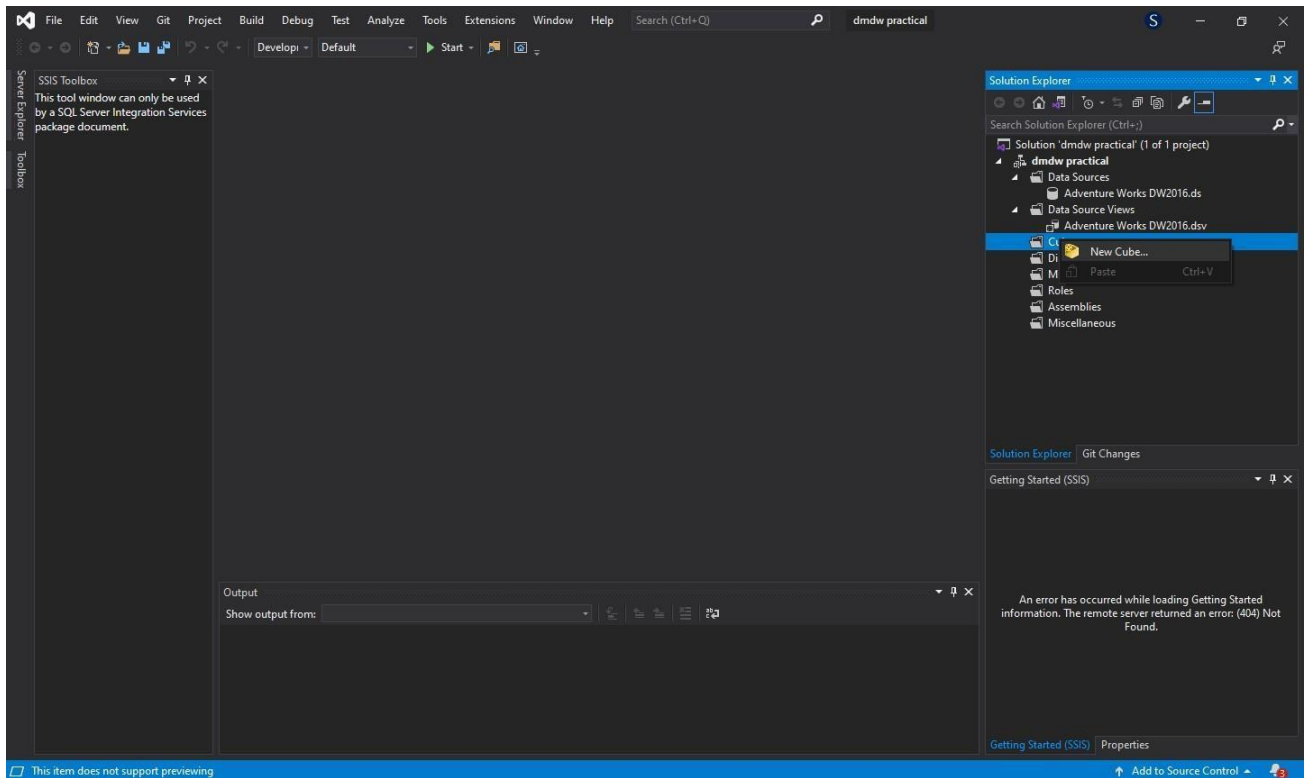


- Now, click on the “>>” button to select all the filtered entries from the ‘Available Objects’ into the ‘Included Objects’ list.

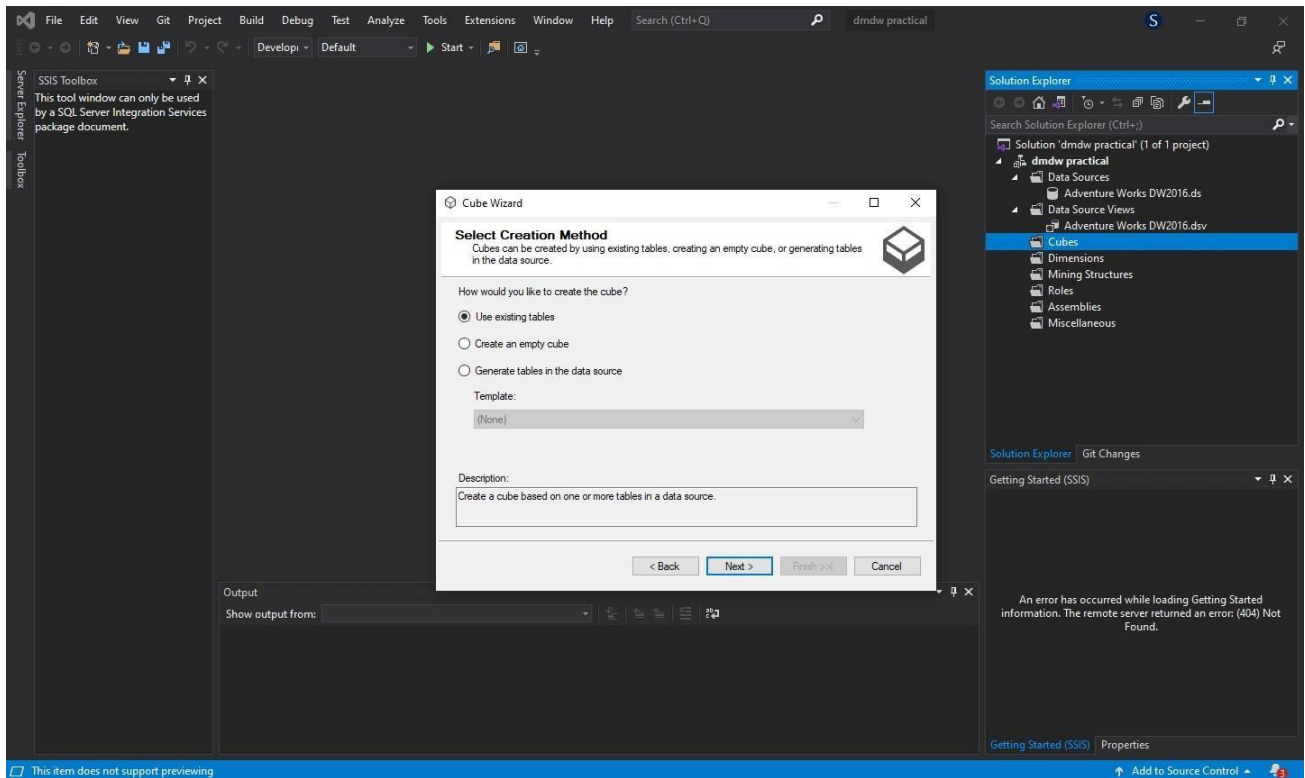


- Click on “Next”. The window will further transition to a new state. Click on “Finish” to close the window. The window will now close to reveal a child node in the ‘Data Source Views’ tree item. Right

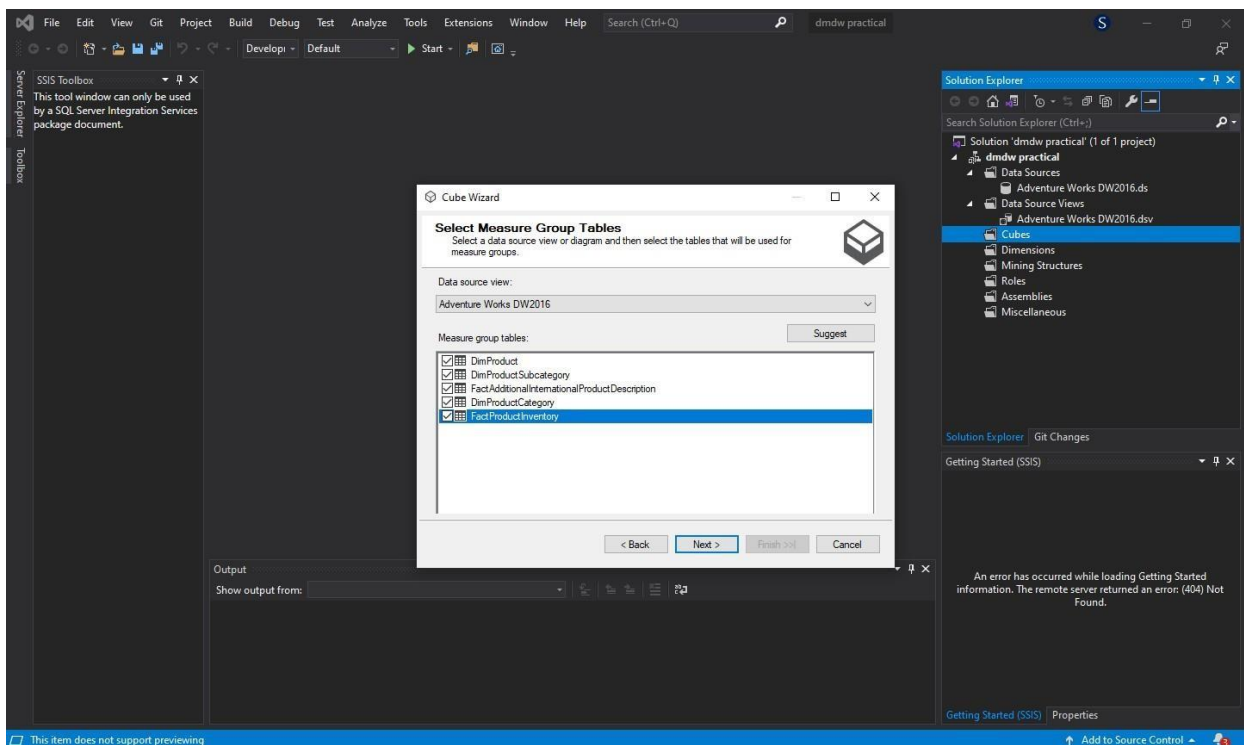
click on the 'Cubes tree item present directly below the 'Data Source Views' parent node to generate a popup menu with the "New Cube" menu item.



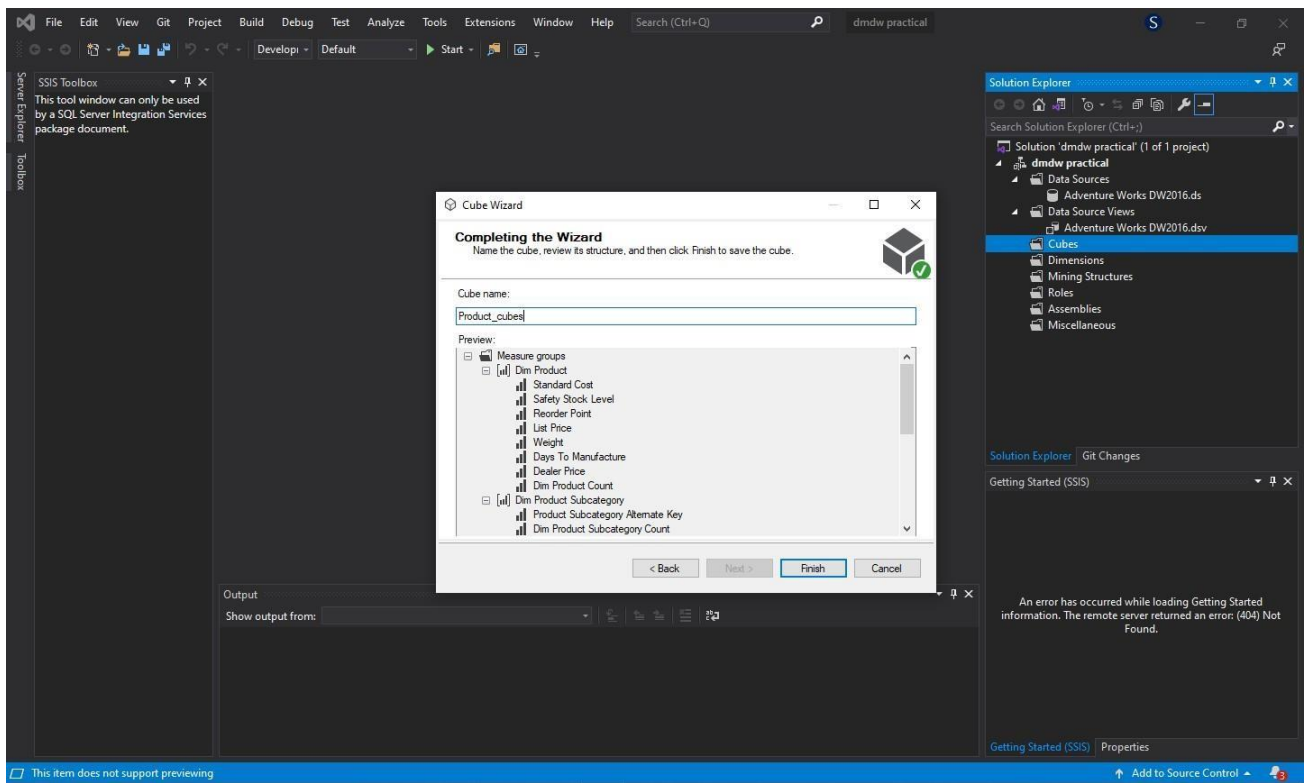
- Click "New Cube..." to create a new window titled 'Cube Wizard'. Click on "Next" to transition the window to 'Select Creation Method' state. Select the "Use existing tables" option.



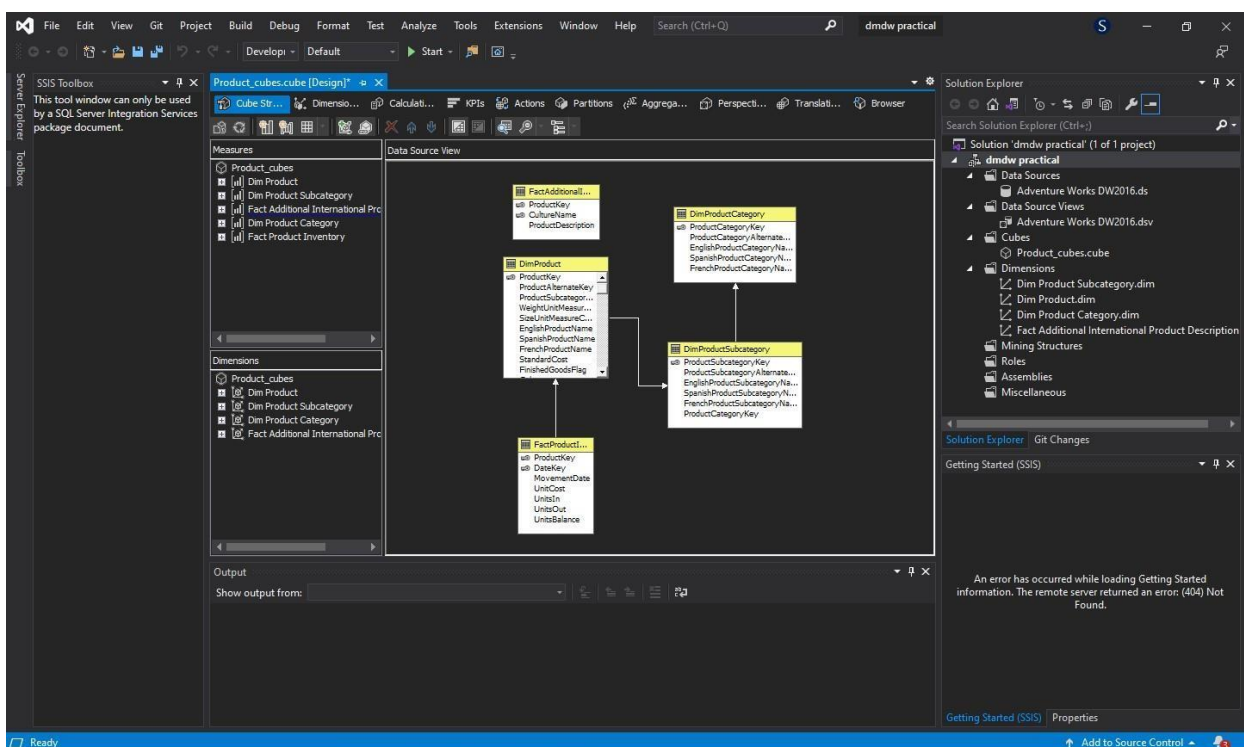
- Click on “Next”. The window will now transition to the ‘Select Measure Group Tables’ state. Select the tables from the ‘Measure Group Tables’ list.



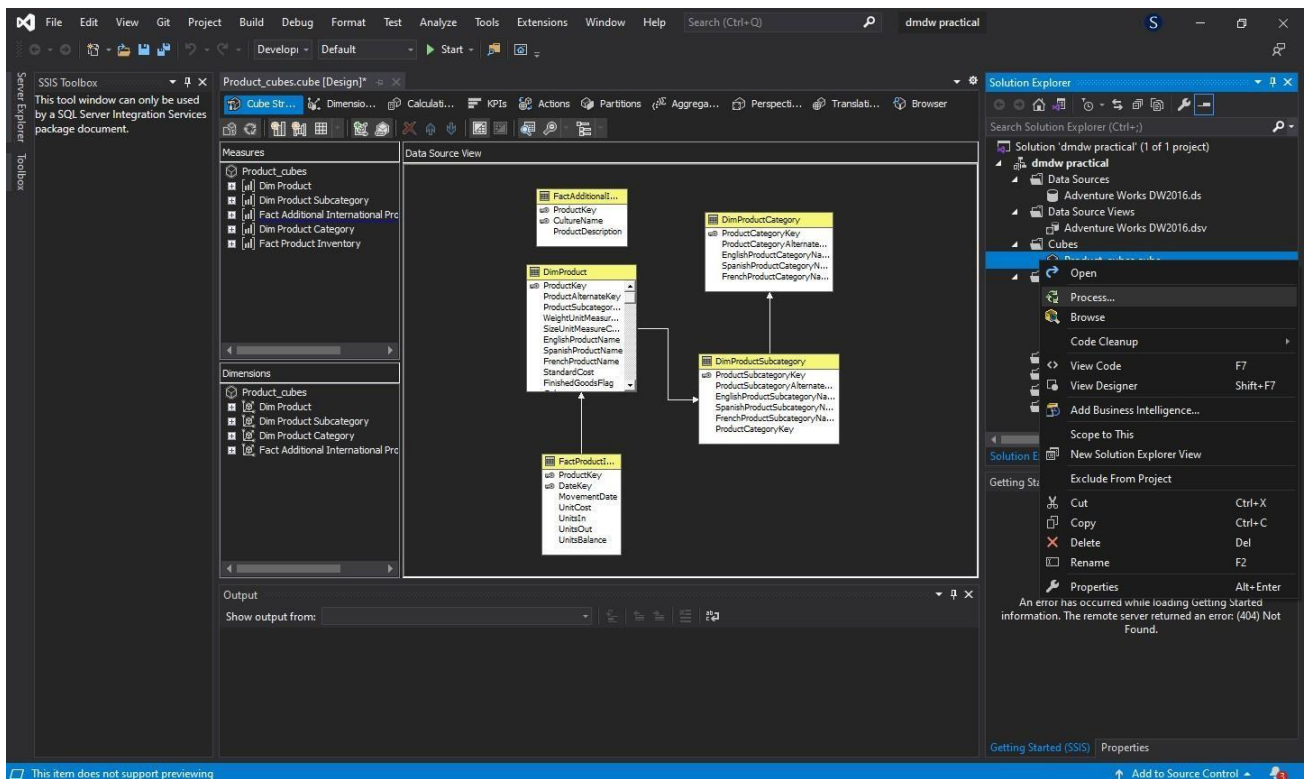
- Click on “Next”. The window will now transition to its final state named ‘Completing the Wizard’. Check the ‘Preview’ section and if everything is okay, click on “Finish”.



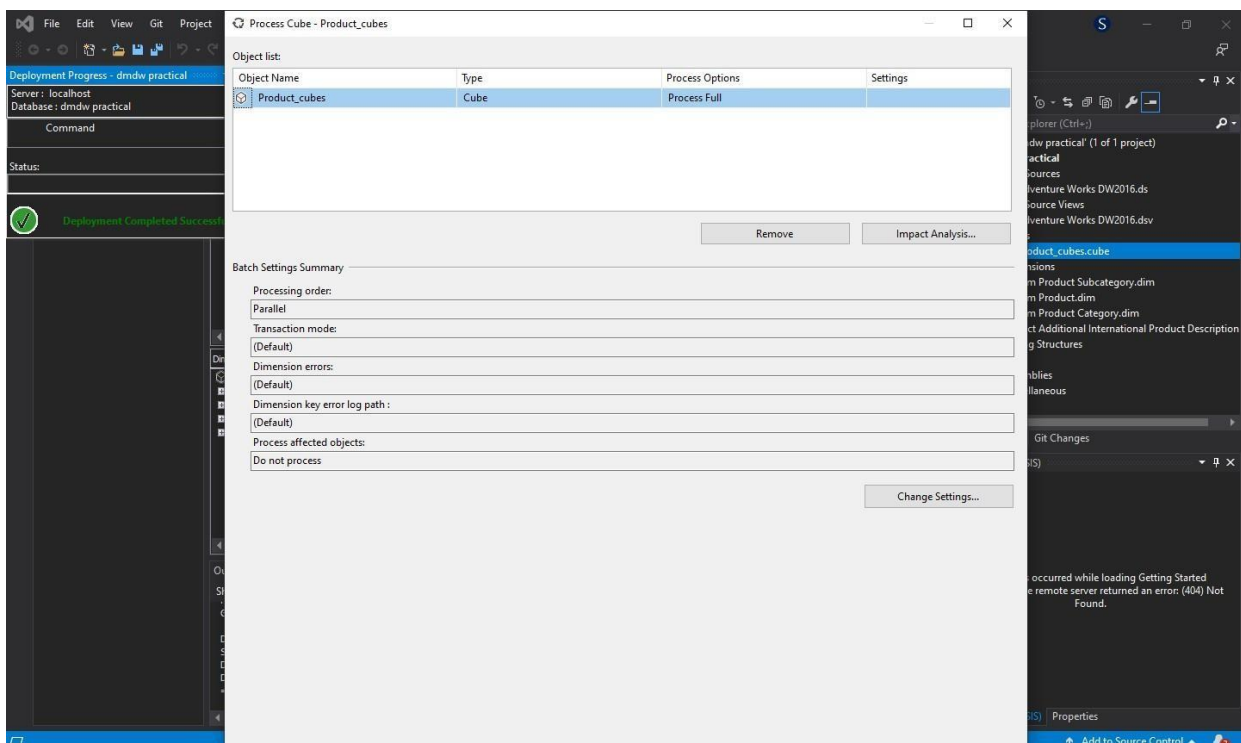
- A diagram should now appear on the screen displaying the logical star schema of the selected tables.



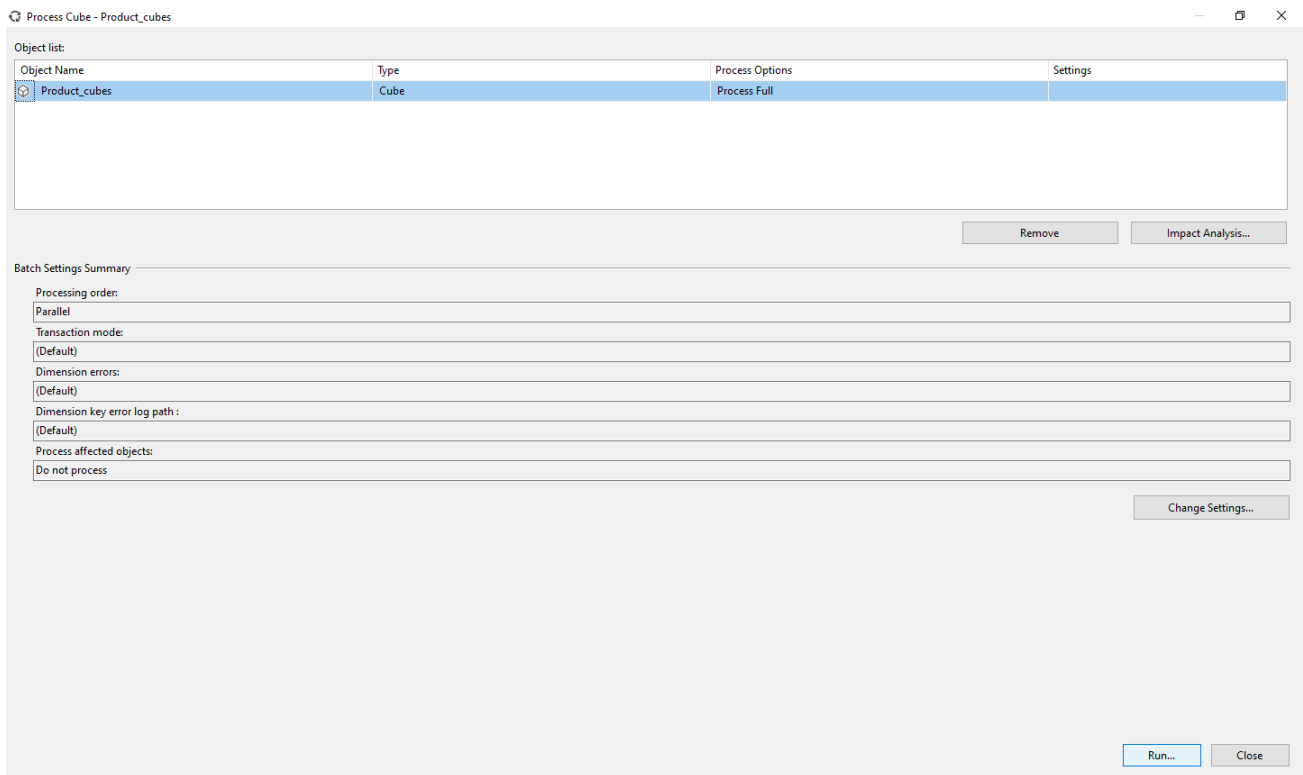
- Now right click the generated cube to reveal a popup menu.



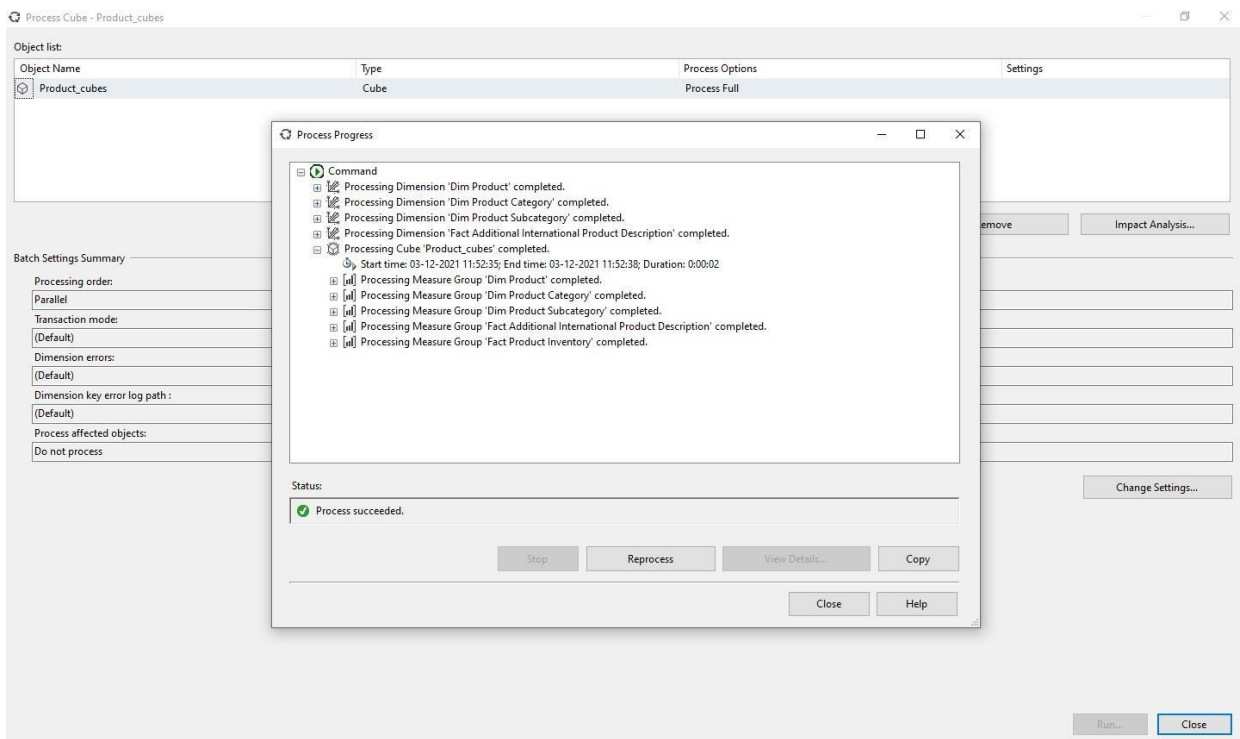
- Click on the “Process...” menu item to generate the ‘Process Cube – {Cube_Name}’ window.



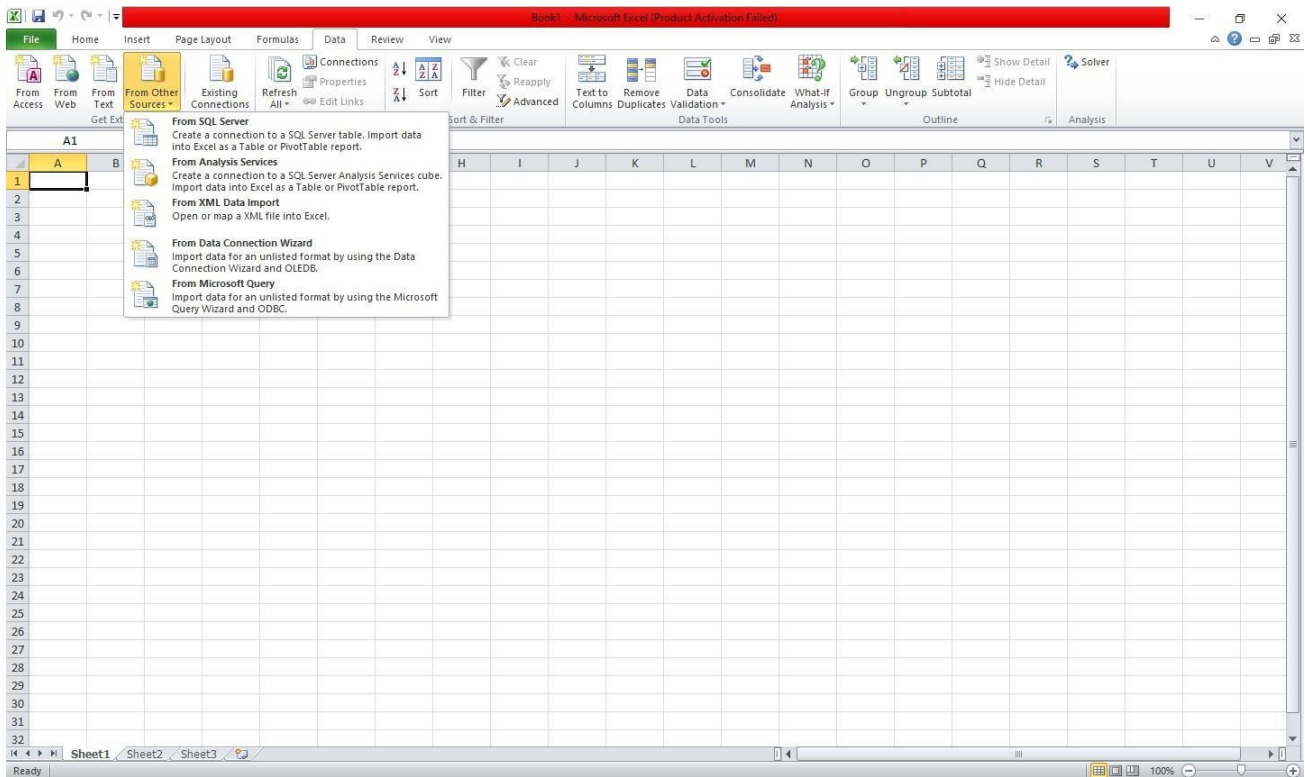
- Maximise this window to see the “Run” button.



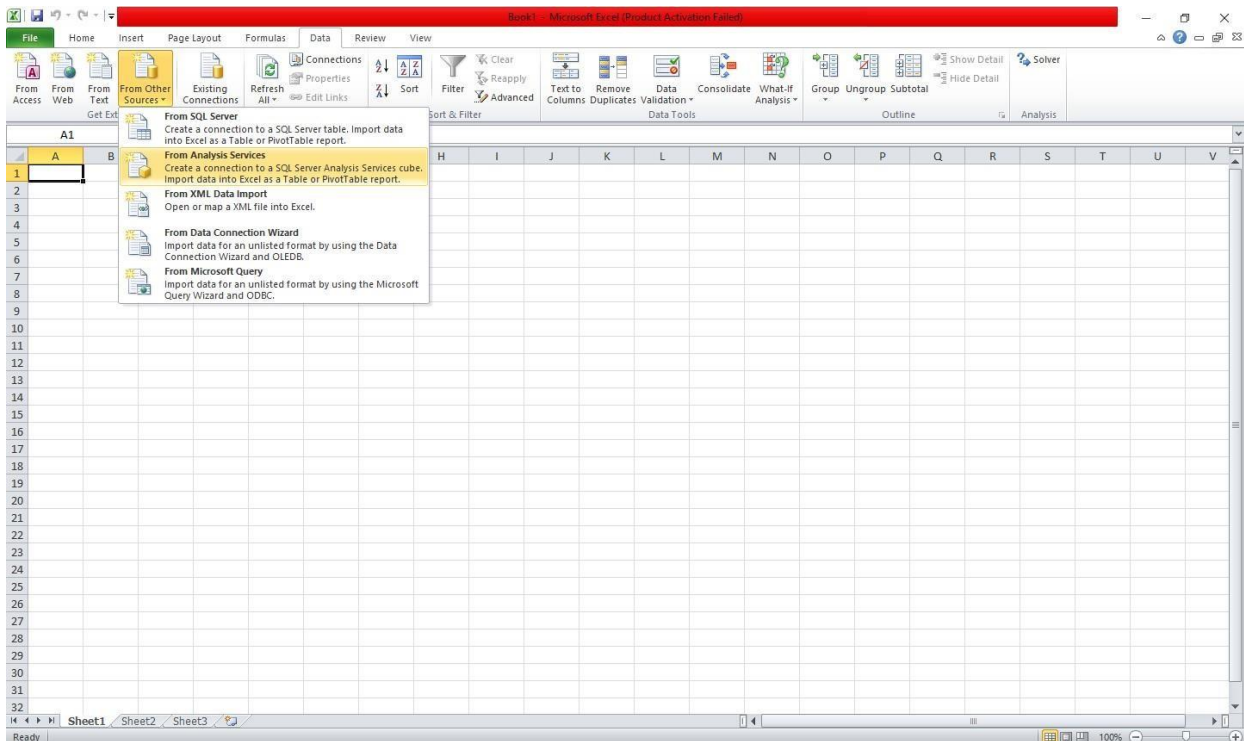
- Click the “Run” button to process the cube. If everything goes right, you should see the ‘Status’ as ‘Process succeeded’.



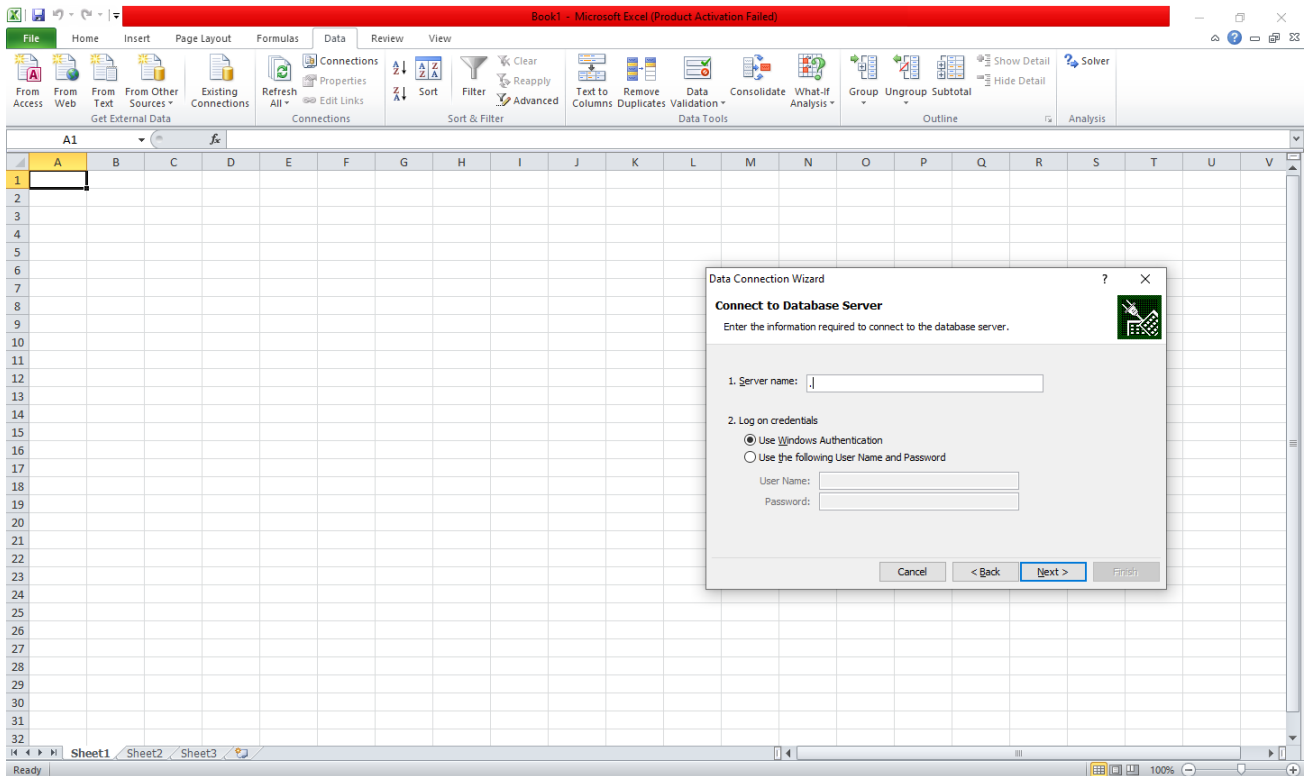
- Now, start Excel. Select the 'Data' section from the menu to display the Data ribbon. Select the "From Other Sources" button.



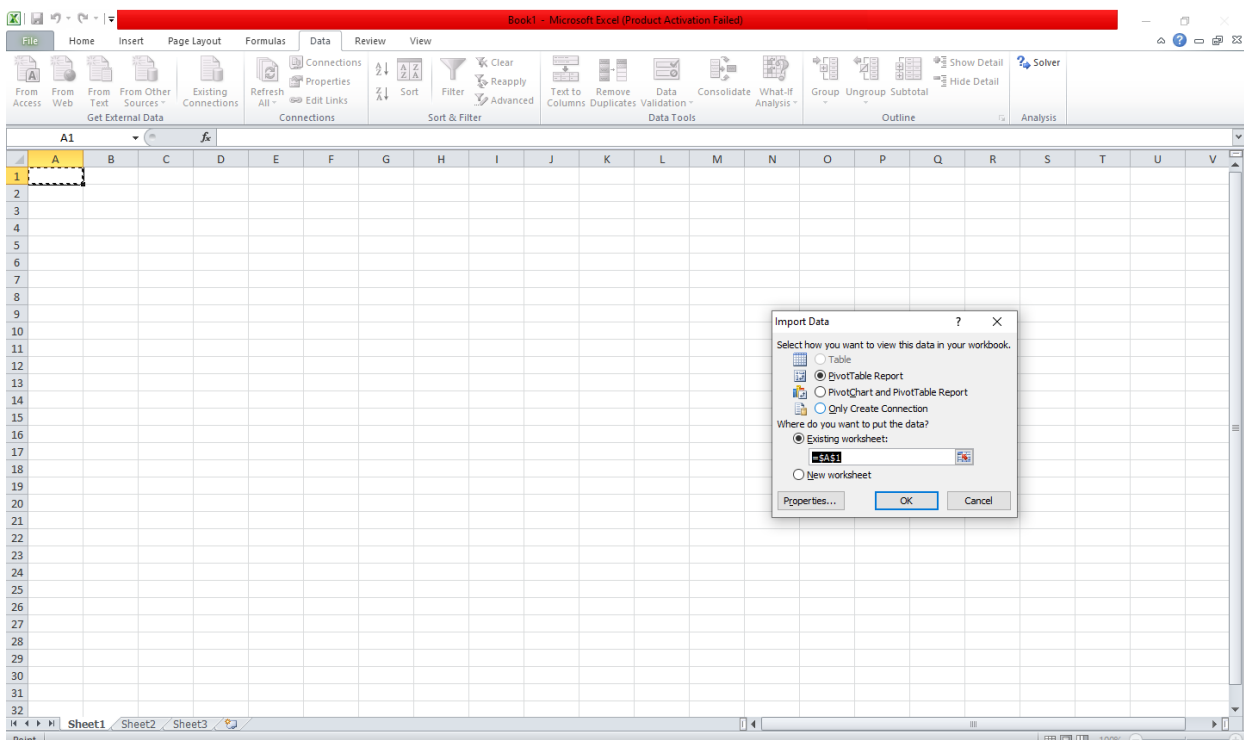
- This reveals a drop down list. Select the "From AnalysisService" option.



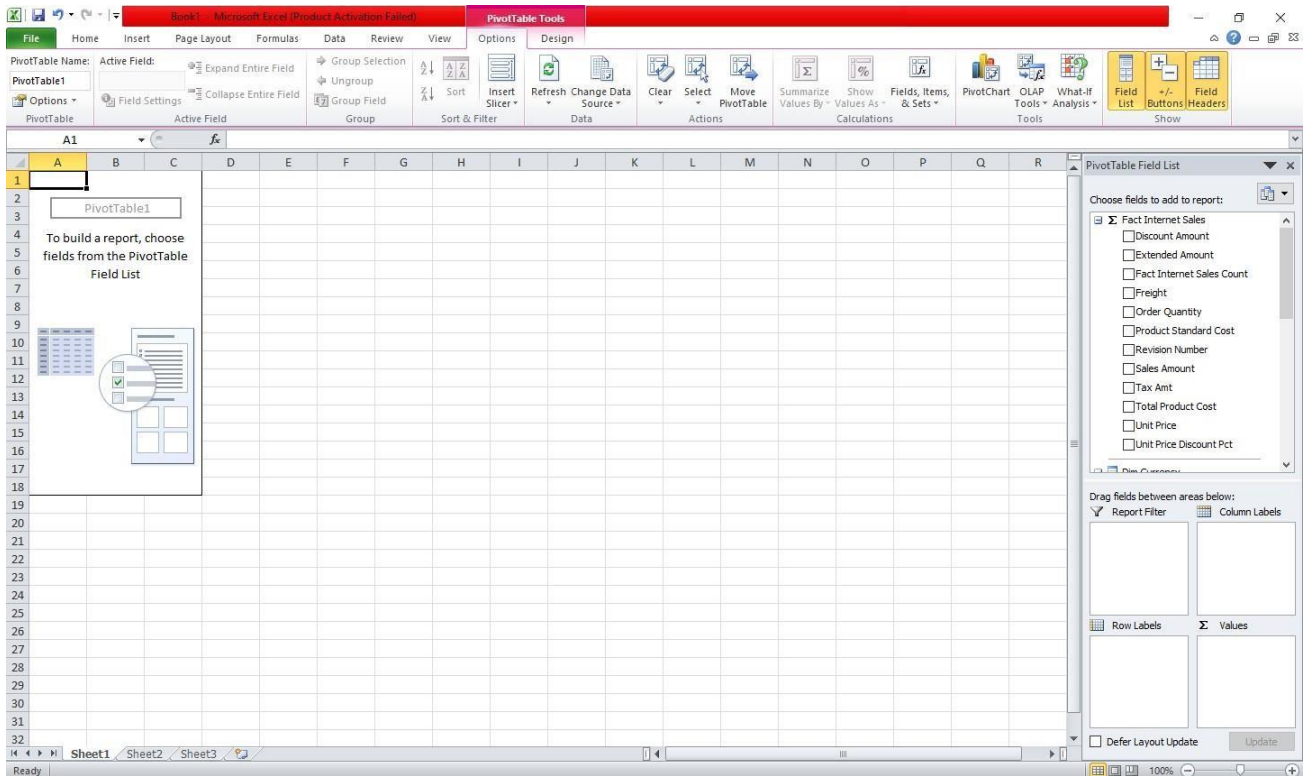
- Now, a popup window titled 'Data Connection Wizard' should appear. Enter '.' or 'localhost' in the 'Server Name' text box.



- Click on "Next". The 'Data Connection Wizard' should now close and a new popup window called 'Import Data' should appear.



- Keep the default settings and click on “OK”. The current sheet should look like this:



- Choose the items you want from the right pane. The spreadsheet will be updated automatically.

PivotTable Name: Active Field: Expand Entire Field Group Selection Ungroup Group Field Group

PivotTable1 Product Key Field Settings Collapse Entire Field Active Field

PivotTable Active Field Sort & Filter Sort Insert Slicer Refresh Change Data Source Data Clear Select Move PivotTable Summarize Values By Show Values As Fields, Items, & Sets PivotChart OLAP Tools What-If Analysis Tools Field List Buttons Field Headers Show

A1 Row Labels

1 Row Labels 2 214 3 217 4 222 5 225 6 228 7 231 8 234 9 237 10 310 11 311 12 312 13 313 14 314 15 320 16 321 17 322 18 323 19 324 20 325 21 326 22 327 23 328 24 329 25 330 26 331 27 332 28 333 29 334 30 335 31 336 32 337

PivotTable Field List

Choose fields to add to report:

- ☐ Dim Customer
- ☐ Customer Key
- ☒ Dim Product
- ☒ Product Key
- ☐ Dim Promotion
- ☐ Promotion Key
- ☐ Dim Sales Territory
- ☐ Sales Territory Key
- ☐ Due Date
- ☐ Due Date.Date Key
- ☐ Fact Internet Sales
- ☐ Sales Order Number

Drag fields between areas below:

Report Filter Column Labels

Row Labels Values

Product Key

Defer Layout Update Update

PivotTable Name: Active Field: Expand Entire Field Group Selection Ungroup Group Field Group

PivotTable1 Product Key Field Settings Collapse Entire Field Active Field

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A1 Row Labels

1 Row Labels 2 214 3 217 4 222 5 225 6 228 7 231 8 234 9 237 10 310 11 311 12 312 13 313 14 314 15 320 16 321 17 322 18 323 19 324 20 325 21 326 22 327 23 328 24 329 25 330 26 331 27 332 28 333 29 334 30 335 31 336 32 337

PivotTable Field List

Choose fields to add to report:

- ☒ Fact Internet Sales
- ☒ Discount Amount
- ☒ Extended Amount
- ☒ Fact Internet Sales Count
- ☐ Freight
- ☒ Order Quantity
- ☒ Product Standard Cost
- ☐ Revision Number
- ☒ Sales Amount
- ☒ Tax Amt
- ☒ Total Product Cost
- ☐ Unit Price
- ☐ Unit Price Discount Pct

Drag fields between areas below:

Report Filter Column Labels

Row Labels Values

Product Key

Defer Layout Update Update

- Optionally, the data from the spreadsheet can also be plotted.

