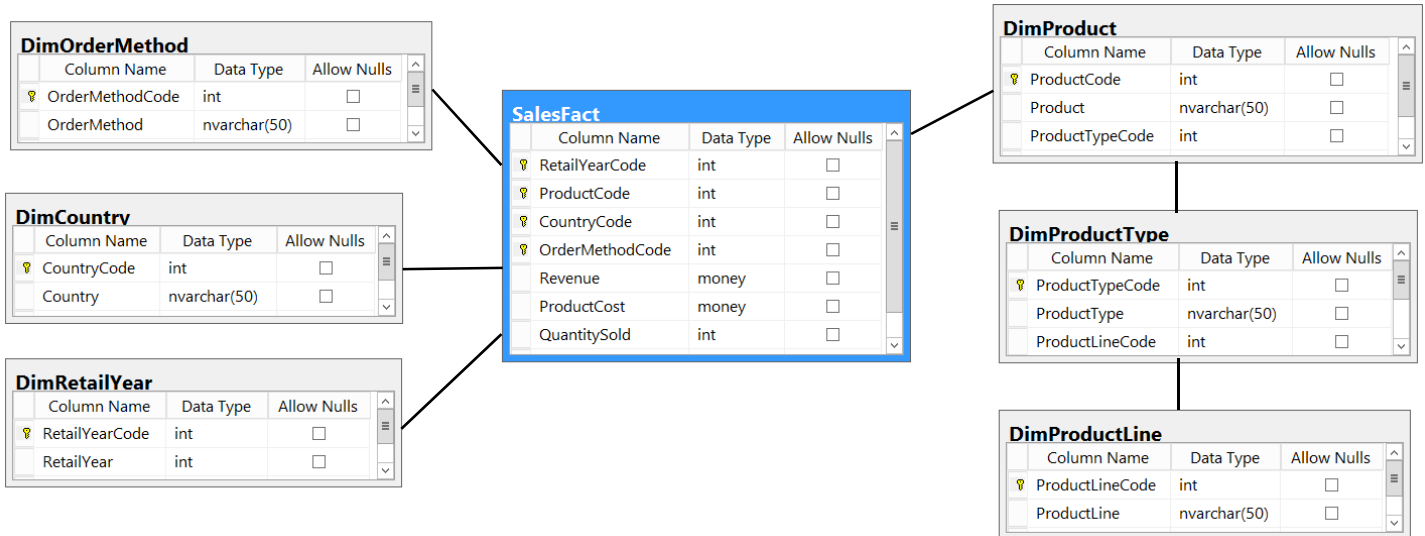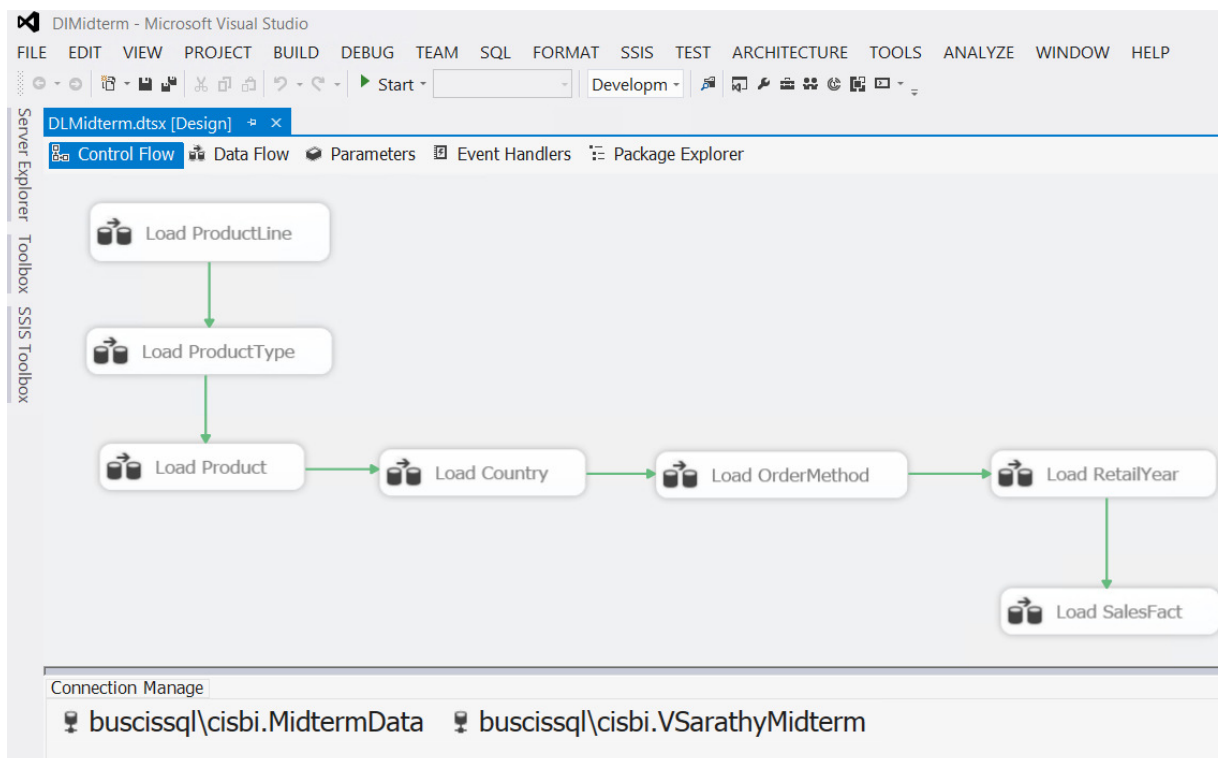# CIS 570 – Midterm Exam
## Summer 2018

You should complete this exam on your own without assistance from anyone else.   The deadline for submitting the exam is 11:59 PM on Sunday, June 17.

A data mart (**your Last Name + MidtermDM**) and analysis services database (**your Last Name + MidtermASD**) have been created for you.  The SQL server instance is **buscissql\cisbi.**
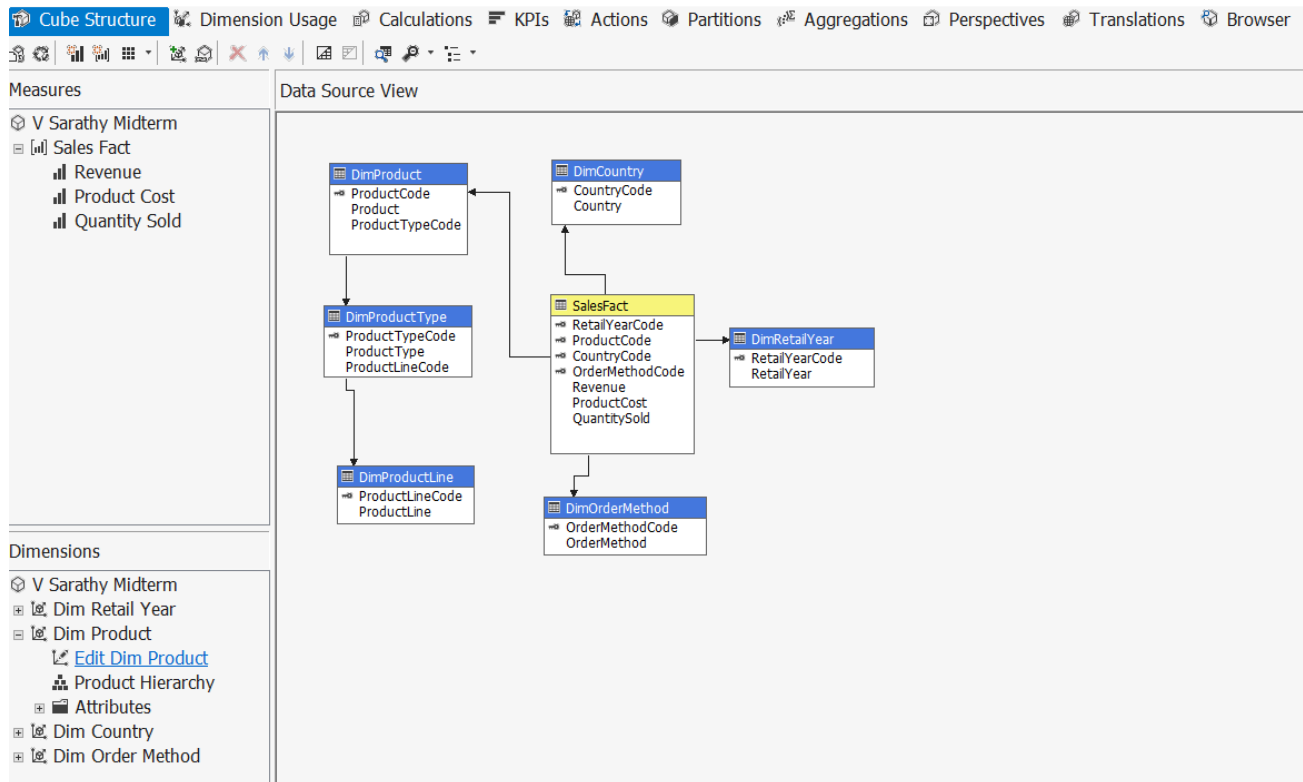
1. Create the following dimension and fact tables in your data mart. (18 Points)



2. Create an integration services project (name the project **DLMidterm** and save it in your class folder for CIS 570 (i.e., "S: drive").  Use the database, **MidtermData**, to fill the tables in your data mart.  See figure below for sample Control Flow. (18 Points)
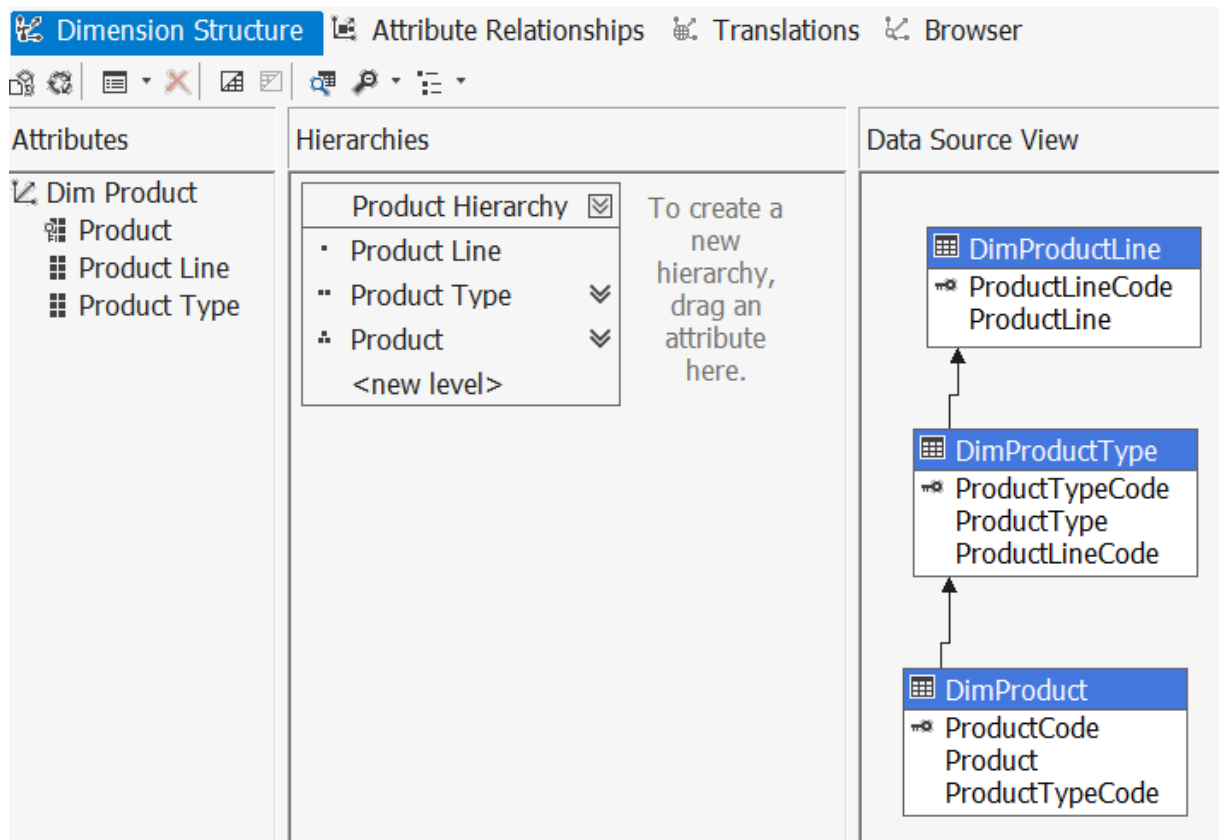
3. Open your analysis services database with Visual Studio 2017, and create a cube using your data mart as the data source. See figure below for cube structure. (12 Points)



4. Create a calculated measure for Gross Profit (Revenue – ProductCost). See figure below. (4 Points)
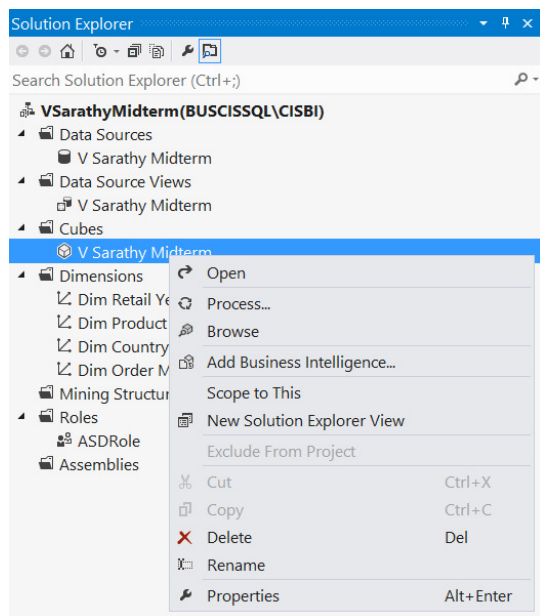
5. Create a hierarchy for the product dimension.  See figure below. (4 Points)



6. Process the cube.

7. Right-click on your cube in the Solution Explorer window, and select Browse. See figure below.



In the browser window, expand the Measures entry in the metadata area.  Drag each of the four measures and drop them on the surface labeled, "Drag levels or measures to add to the query".  See figure below.

8. Click the link, "Click to execute the query". The totals for the four measures for the entire cube will be displayed. Submit these totals (4 Points) and indicate that you have completed the exam. We will check your work on the server and class folder.