

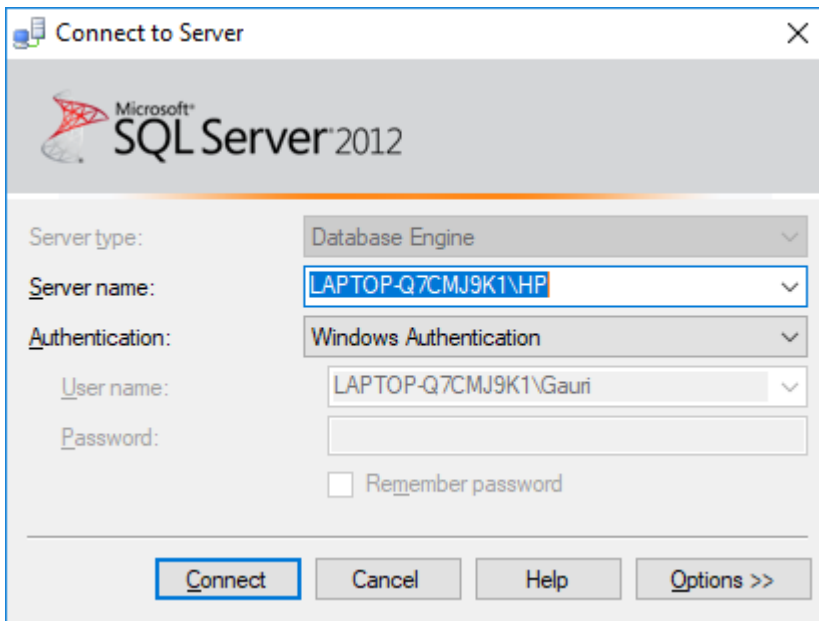
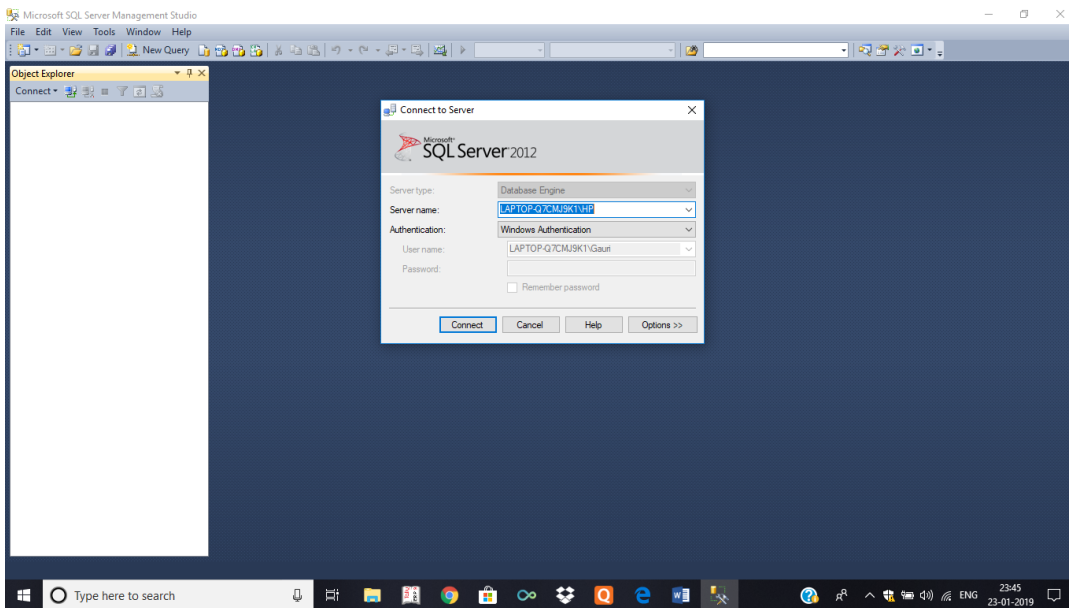
## PRACTICAL 2

**Perform the Extraction Transformation and Loading (ETL) process to construct the database in the SQL server.**

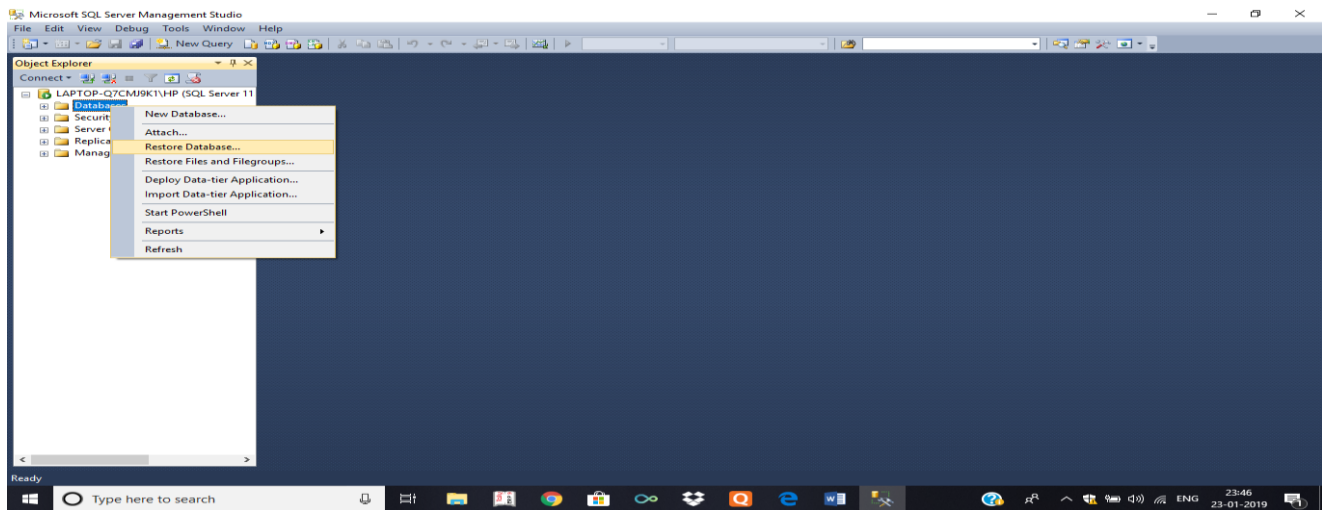
**Software requirements: SQL SERVER 2012 FULL VERSION  
(SQLServer2012SP1-FullSlipstream-ENU-x86)**

### Step 1:

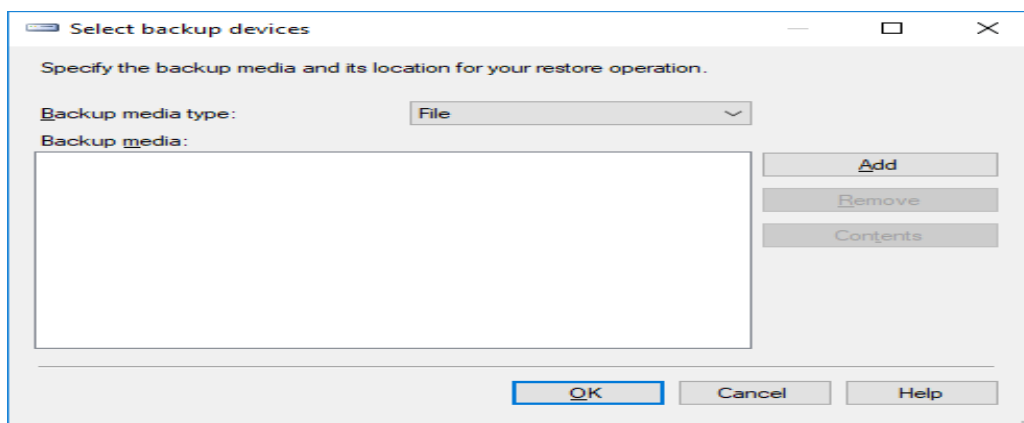
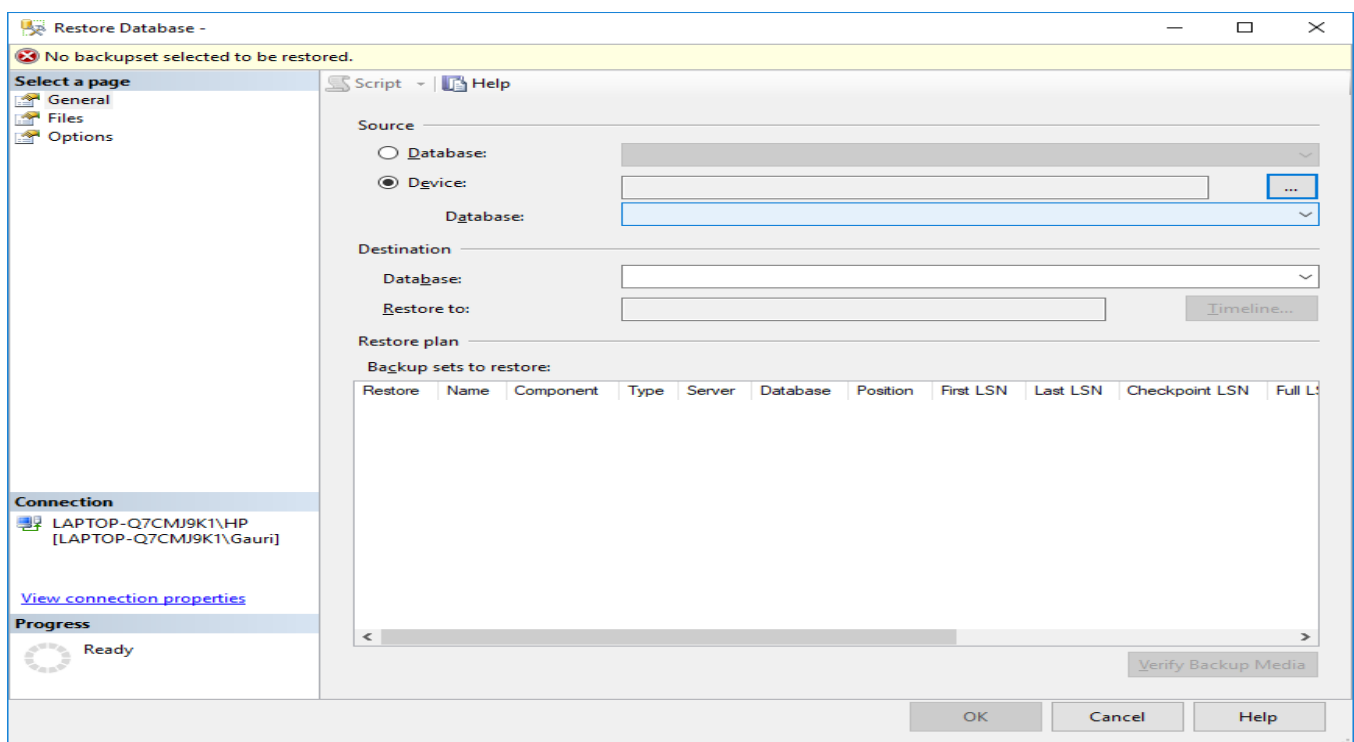
**Open SQL Server Management Studio to restore backup file**



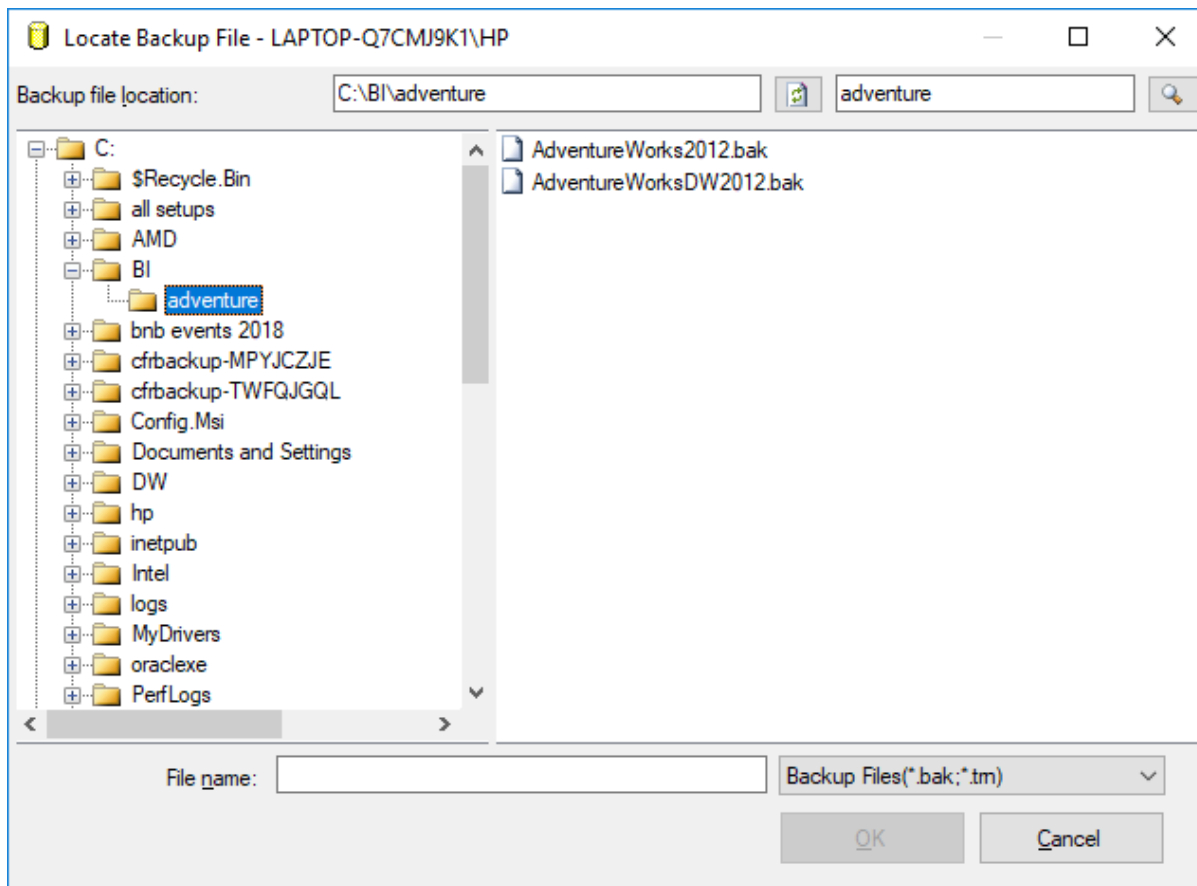
**Step 2: Right click on Databases → Restore Database**



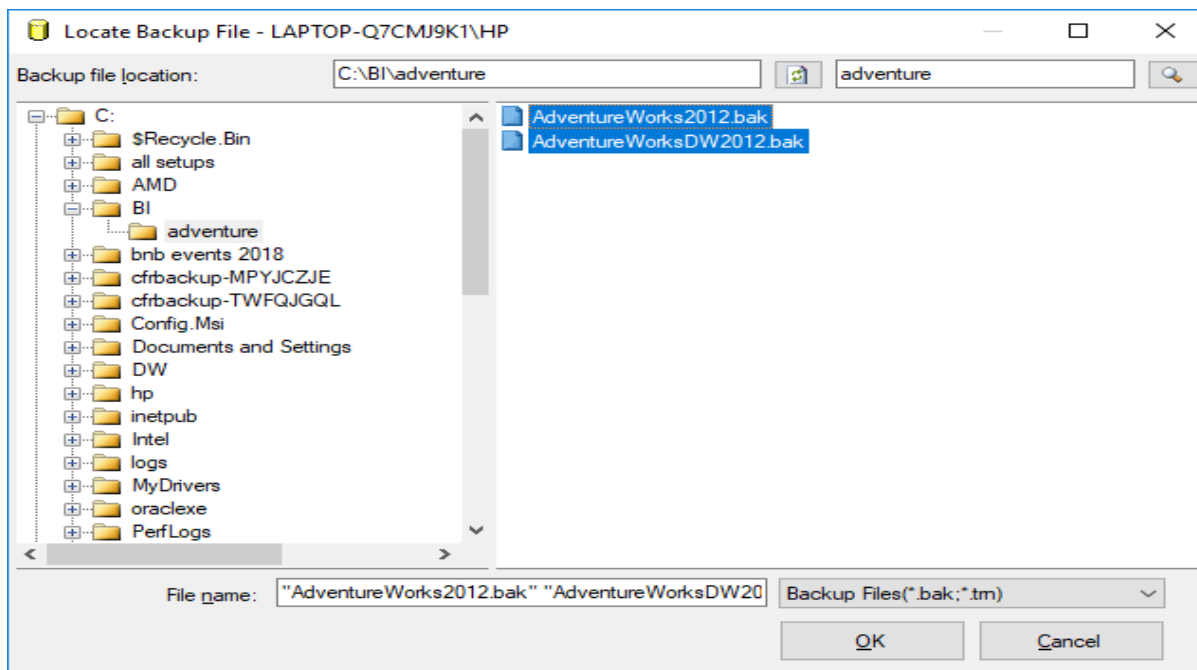
**Step 3: Select Device** → click on  icon towards end of device box



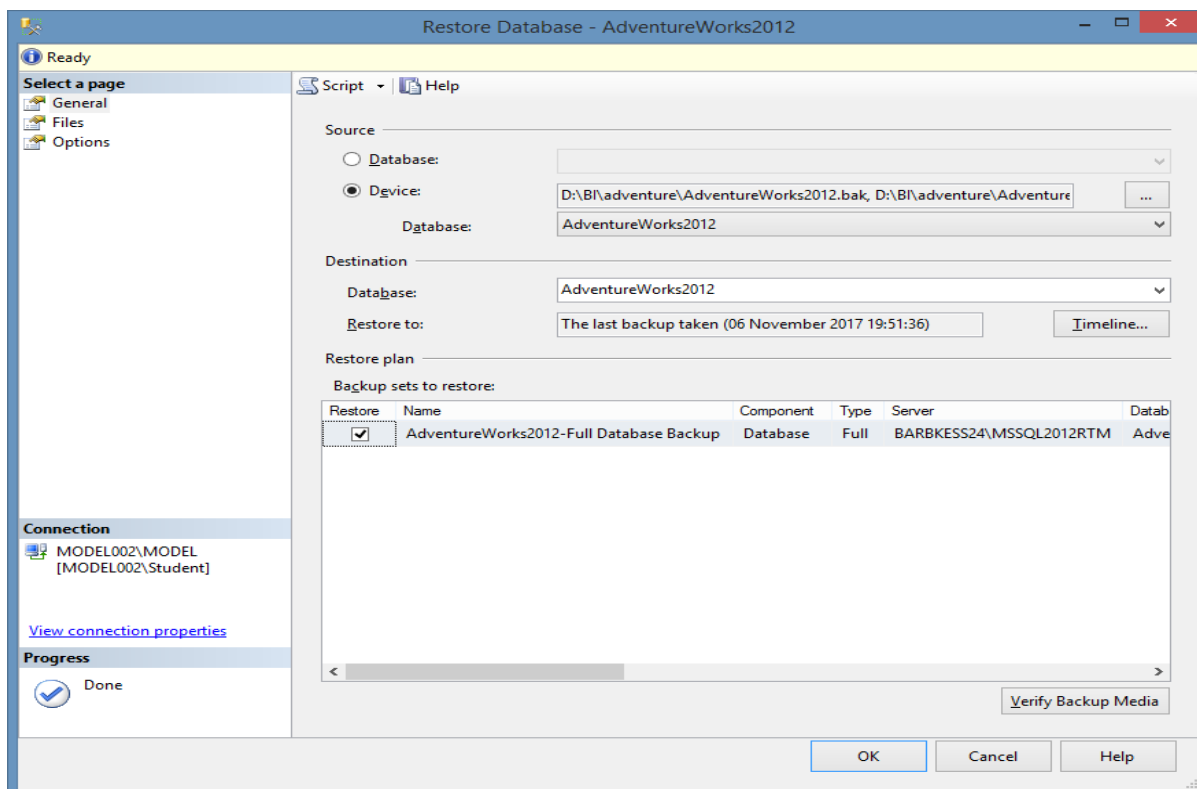
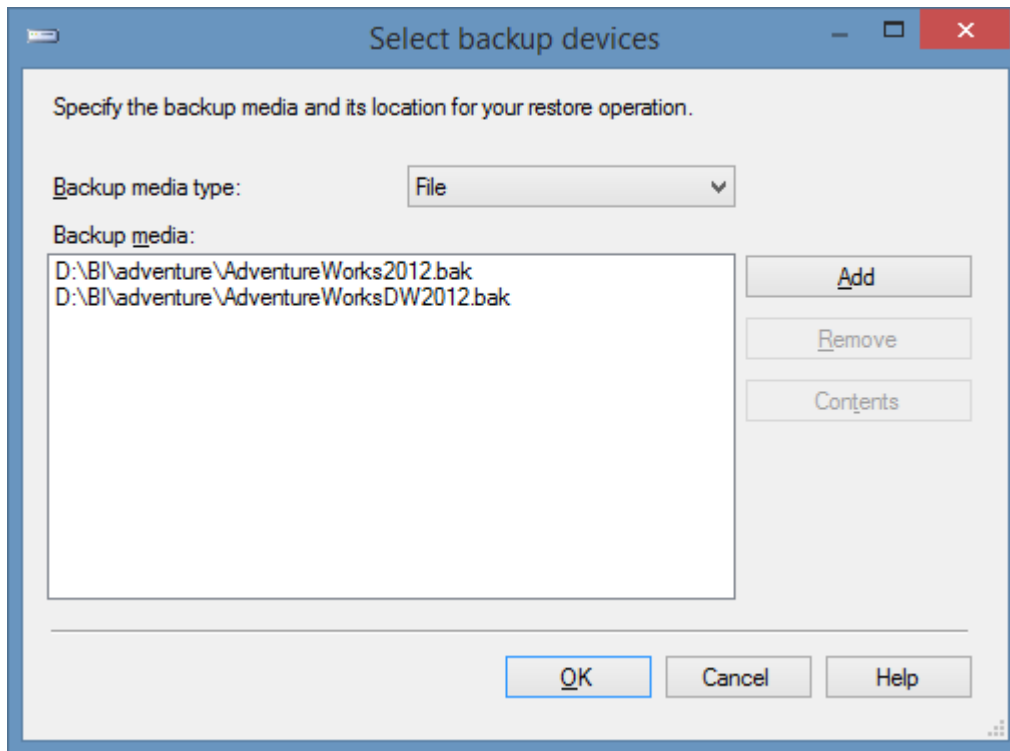
#### Step 4: Click on Add → Select path of backup files

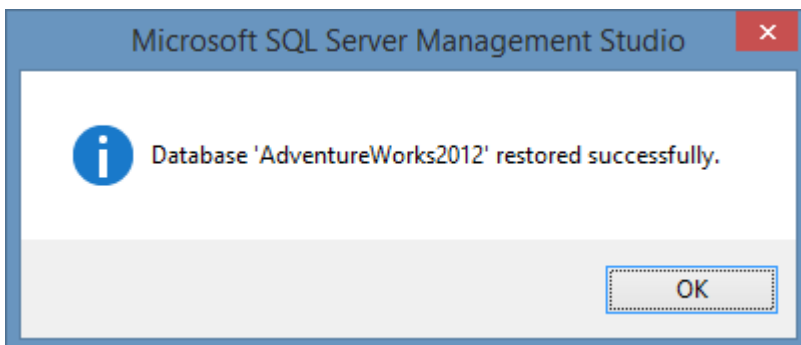
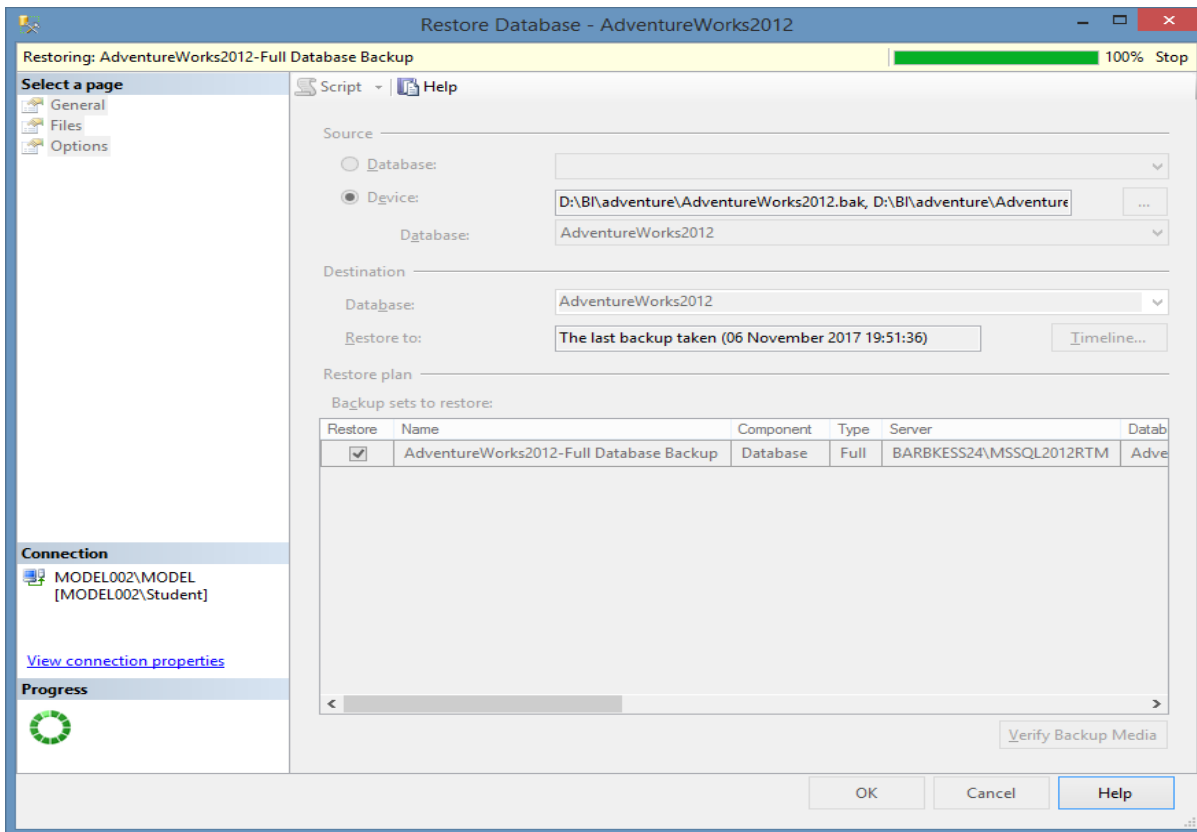


#### Step 5: Select both files at a time



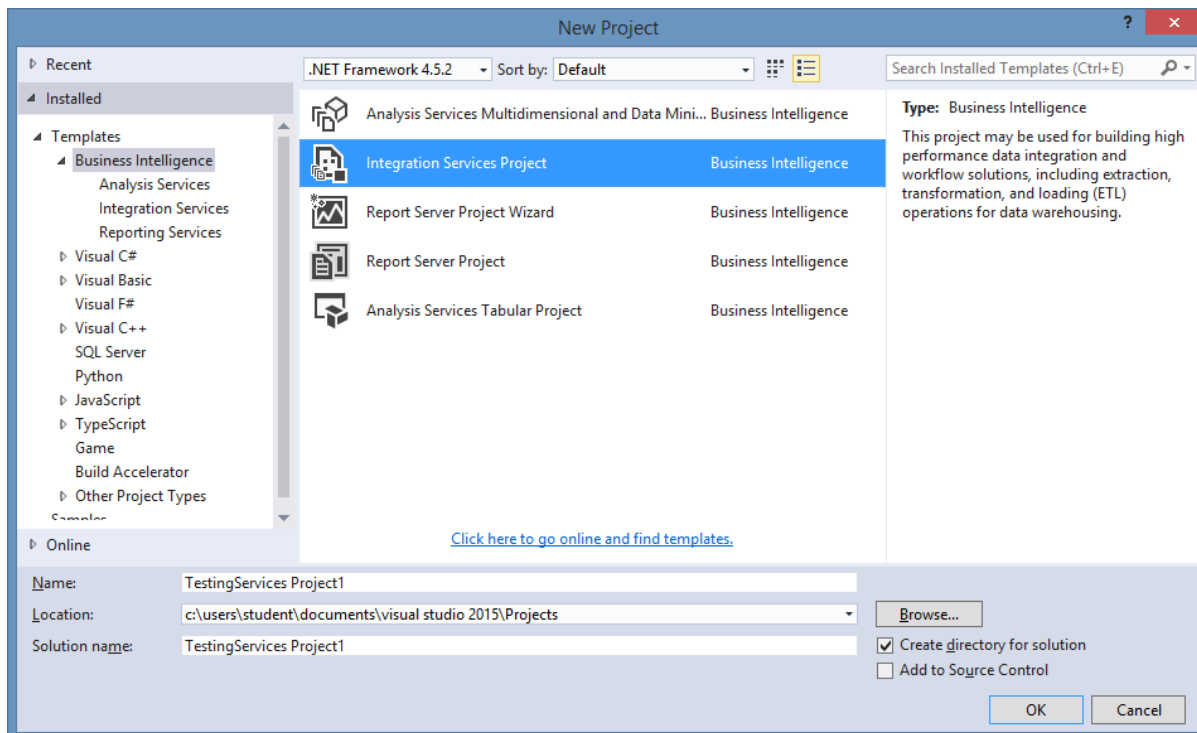
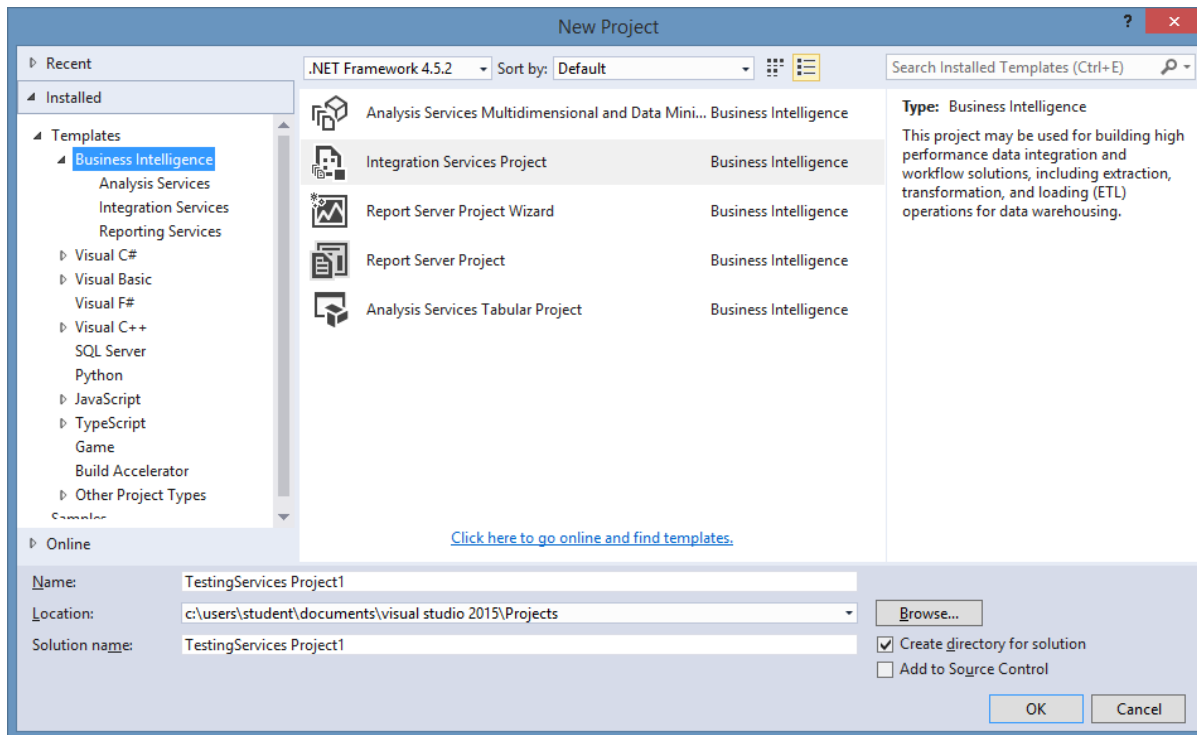
## Step 6 : Click ok and in select backup devices window Add both files of AdventureWorks

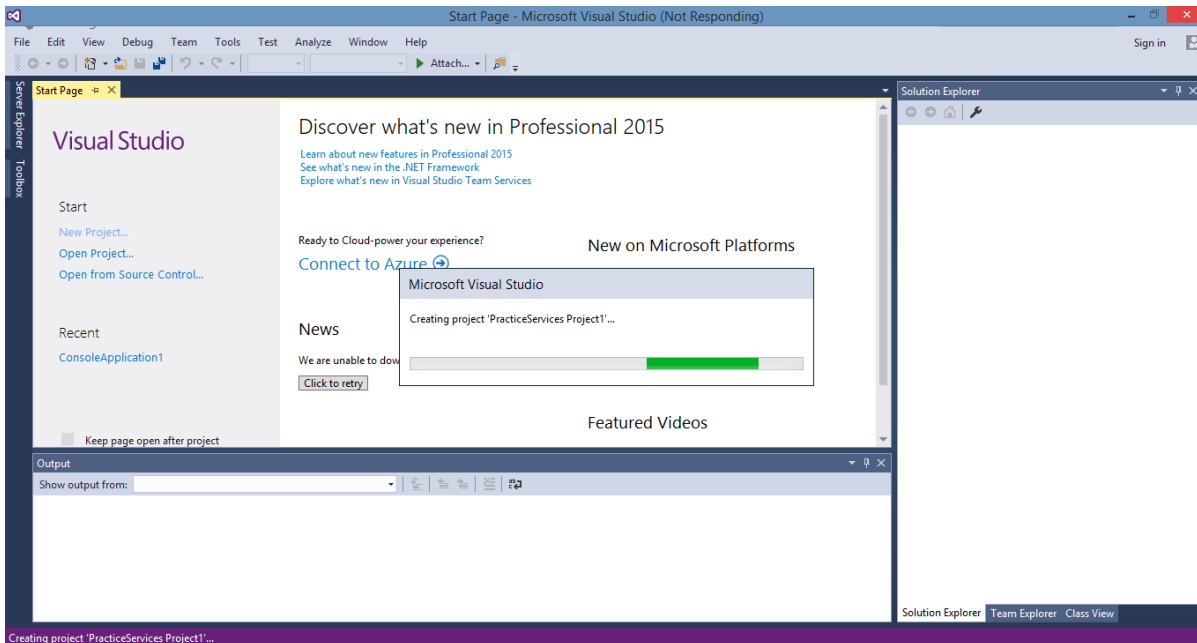
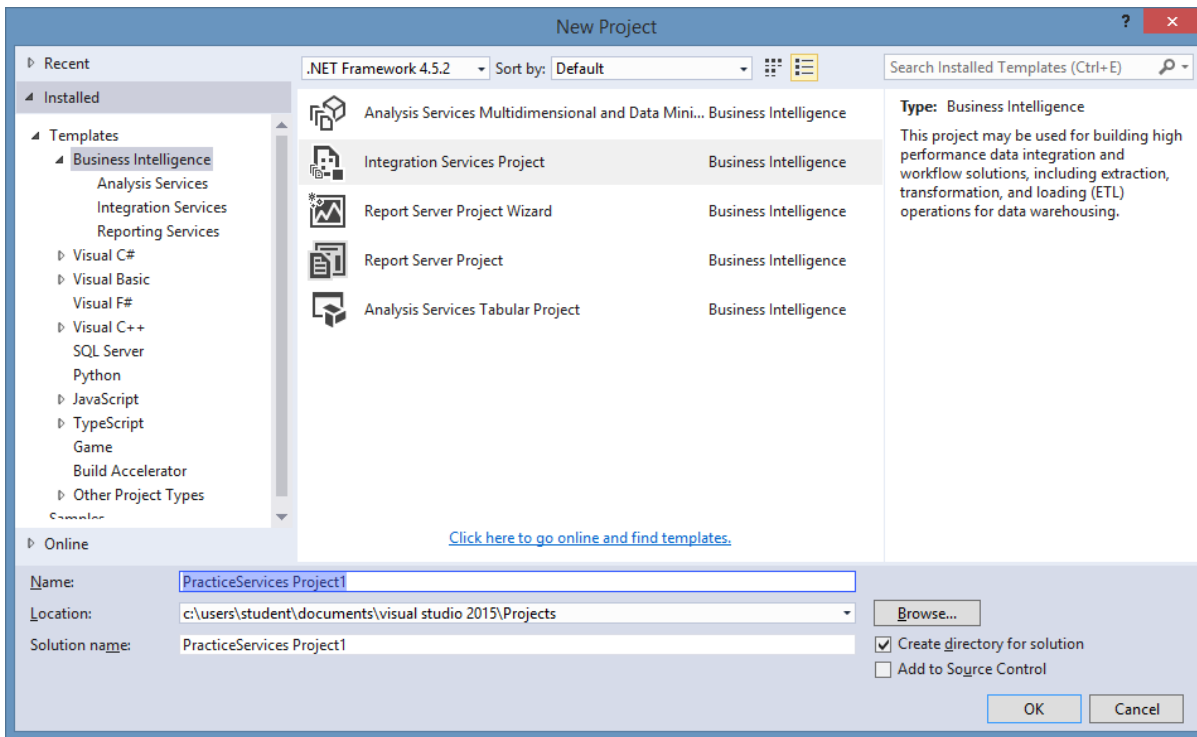




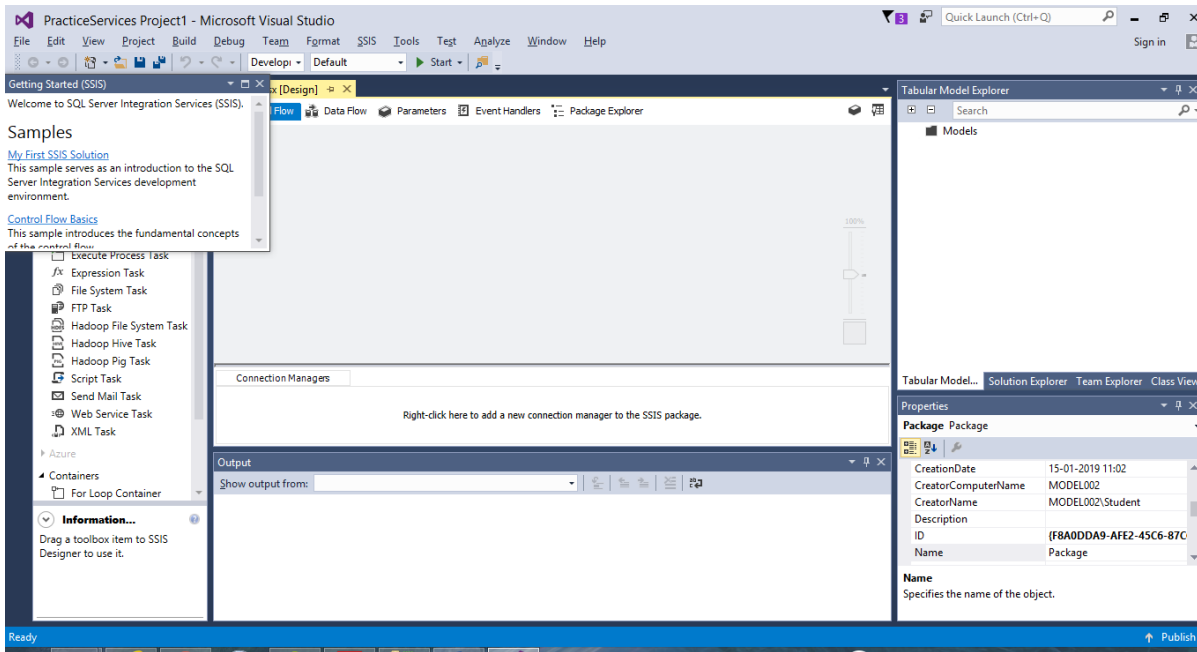
## Step 7: Open SQL Server Data Tools

Select File → New → Project → Business Intelligence → Integration Services Project & give appropriate project name.



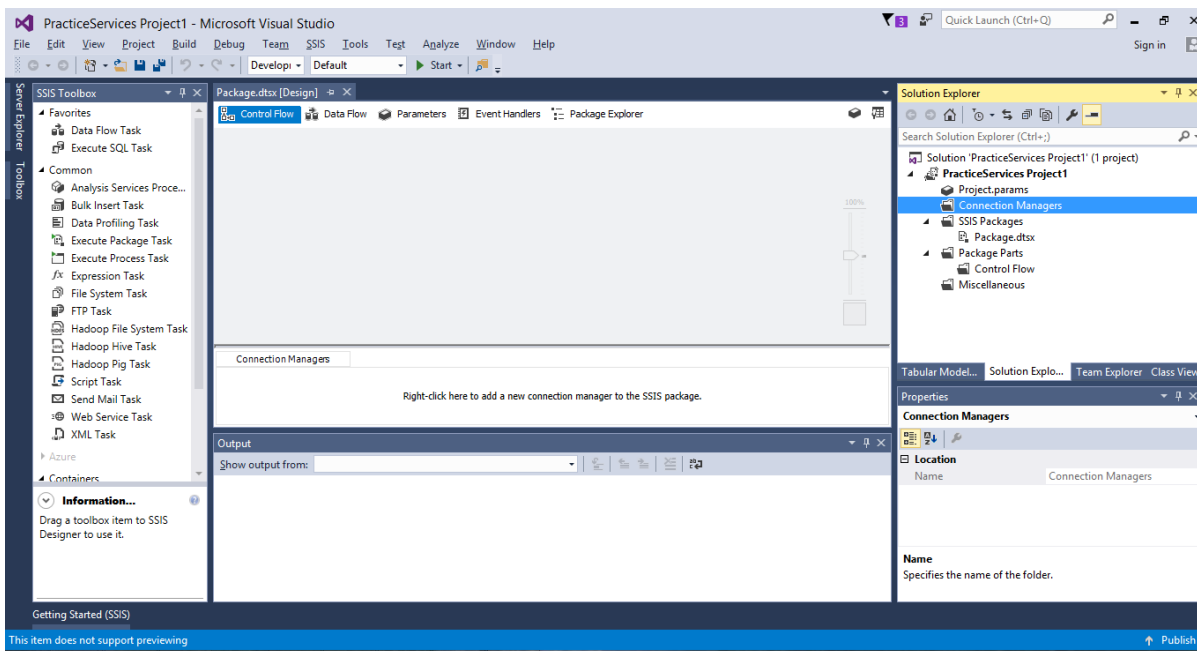


## Environment consists of SQL Server Integration Services(SSIS)



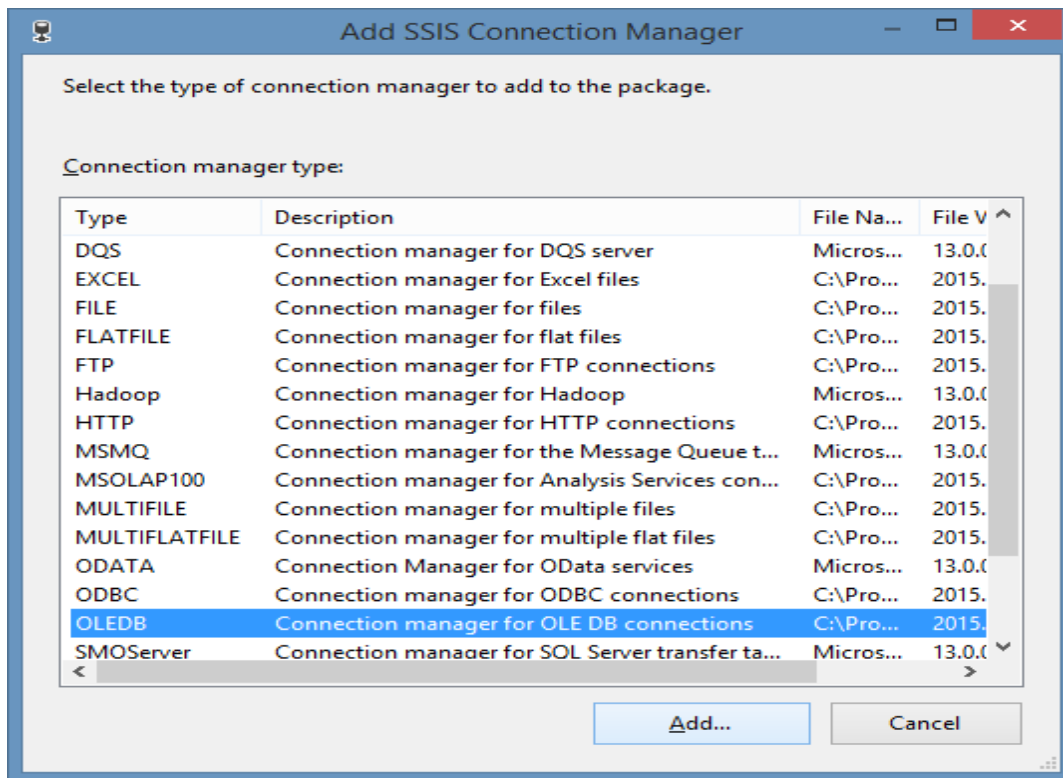
**Step 8: Right click on Connection Managers in solution explorer and click on New Connection Manager.**

**Add SSIS connection manager window appears.**

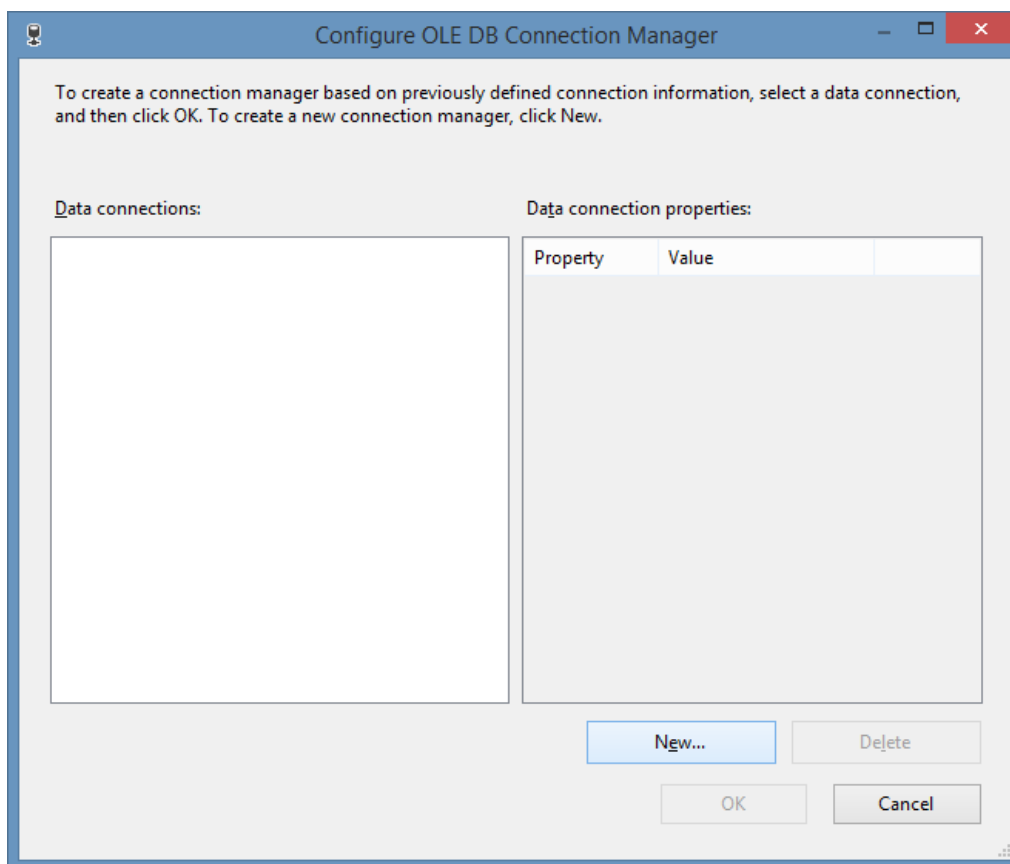




## Step 9: Select OLEDB Connection Manager and Click on Add



## Step 10: Configure OLE DB Connection Manager window appears → Click on New



**Step 11: Select Server name(as per your machine) from drop down and database name and click on Test connection.**

Connection Manager

Provider: Native OLE DB\SQL Server Native Client 11.0

Server name: MODEL002\MODEL Refresh

Log on to the server

Authentication: Windows Authentication

User name: Password: Save my password

Connect to a database

☒ Select or enter a database name: AdventureWorks2012

☐ Attach a database file: Browse... Logical name:

Test Connection OK Cancel Help

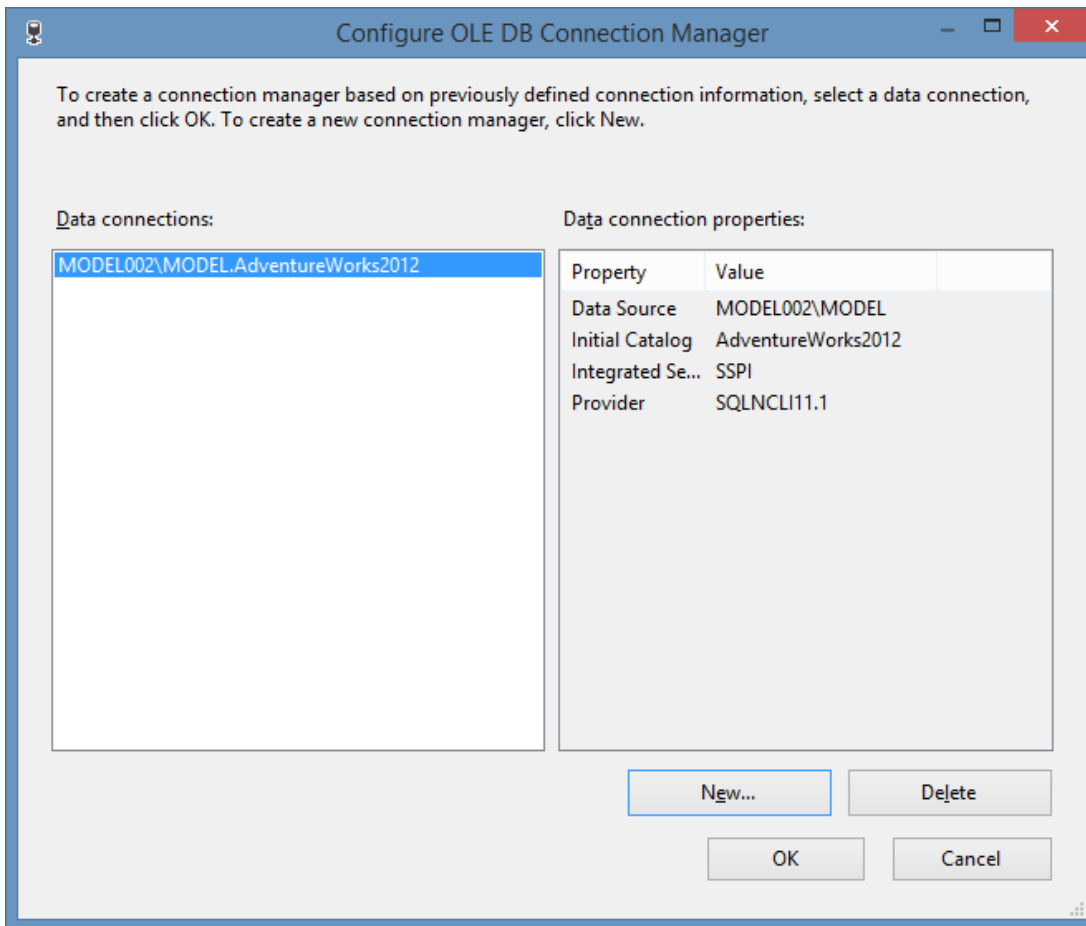
**If test connection succeeded click on OK.**

Connection Manager

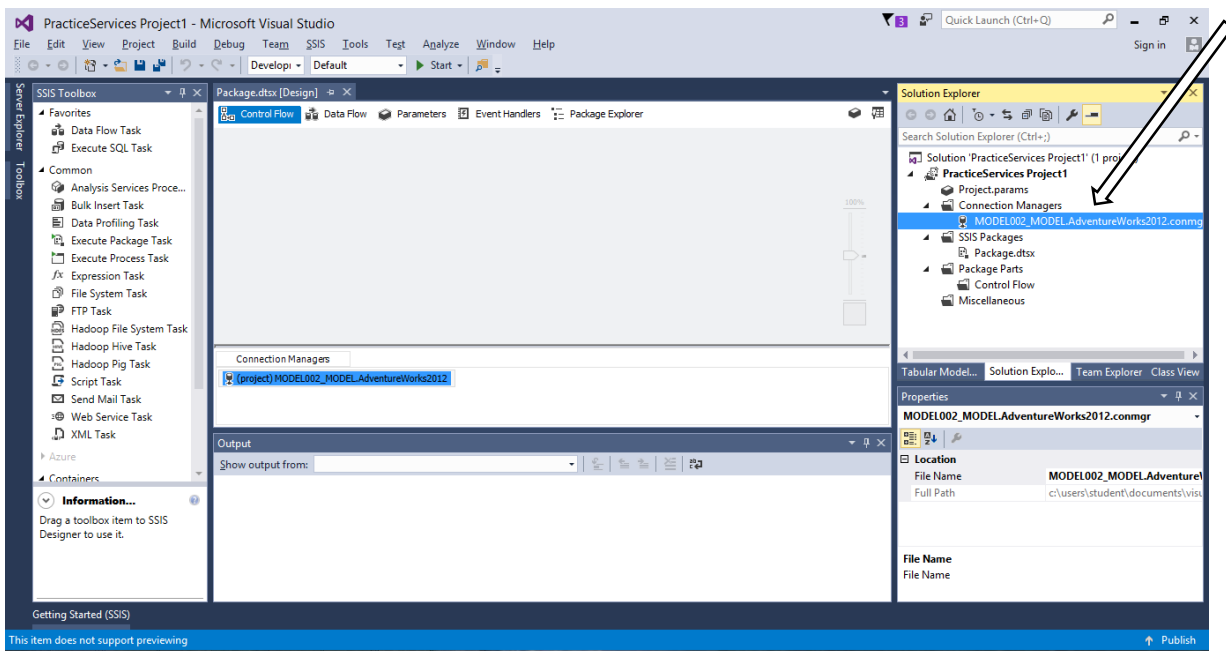
Test connection succeeded.

OK

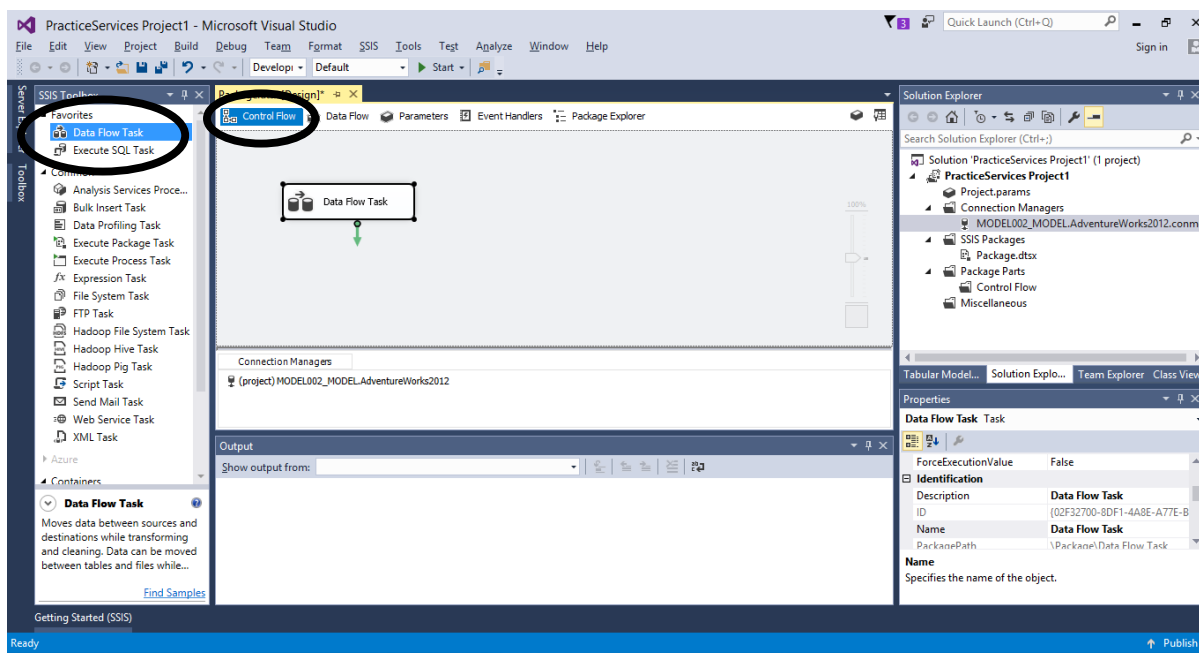
**Step 12: Click on OK**



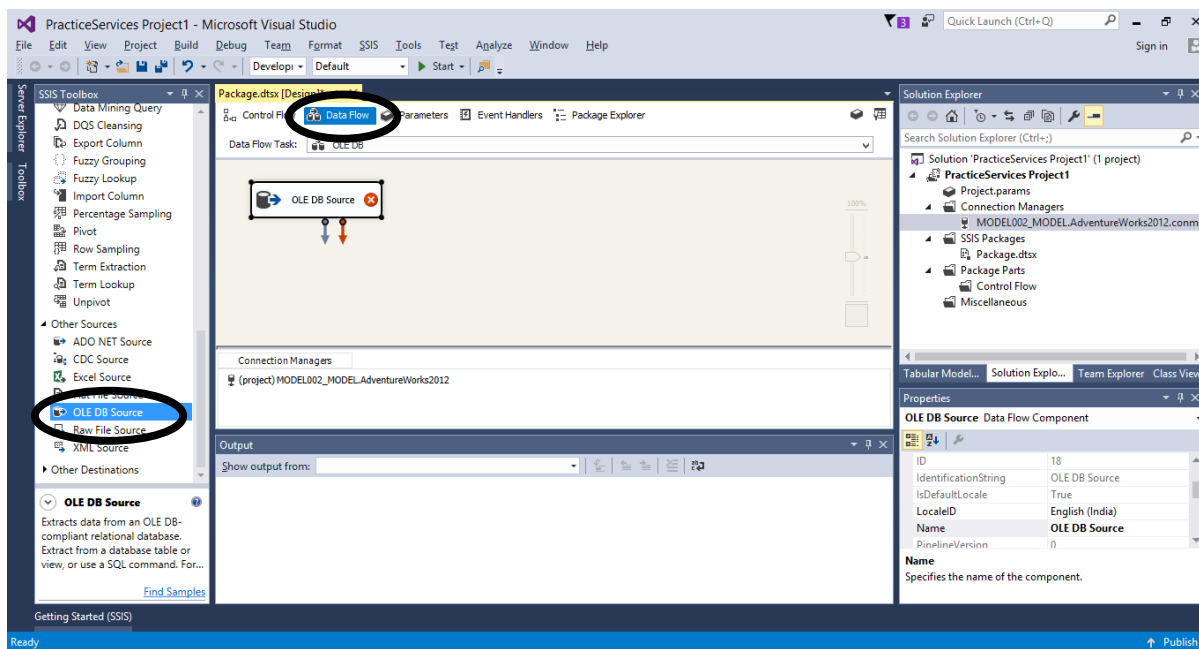
## Connection is added to connection manager



## Step 13: Drag and drop Data Flow Task in Control Flow tab

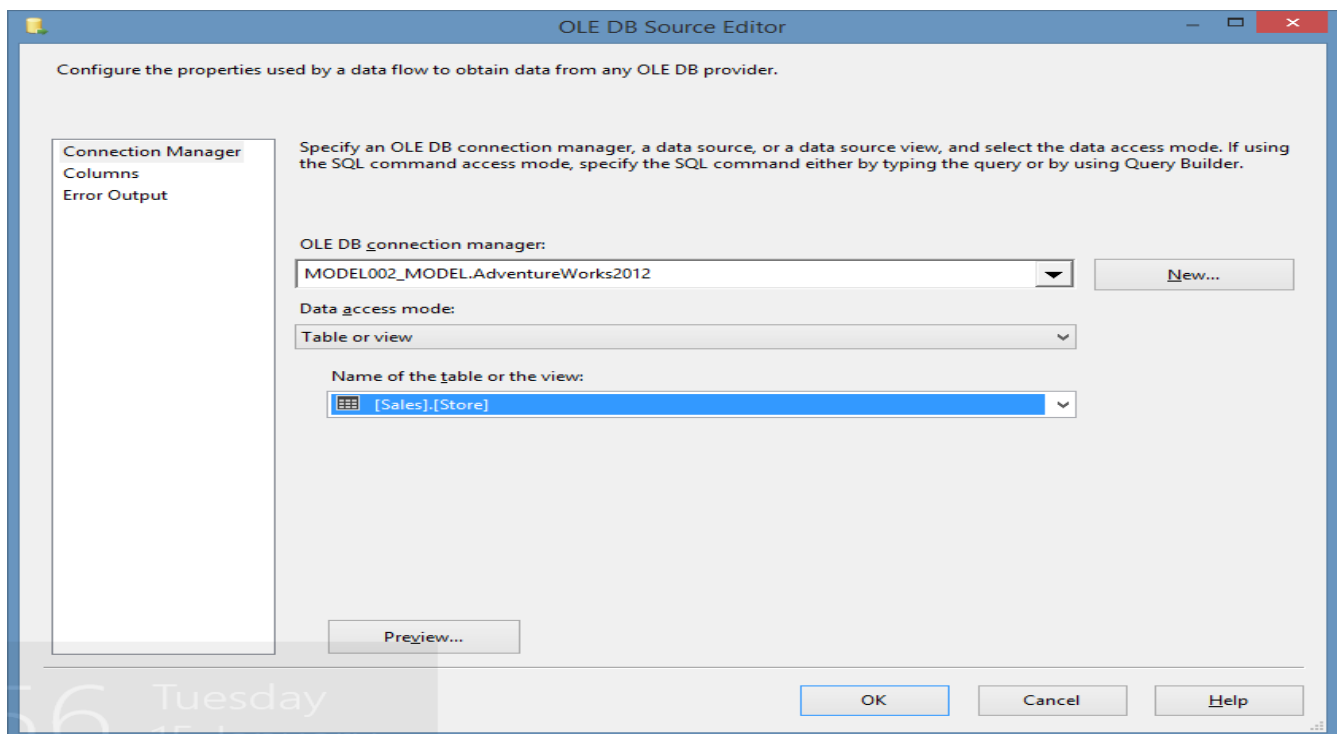


## Step 14: Drag OLE DB Source from Other Sources and drop into Data Flow tab

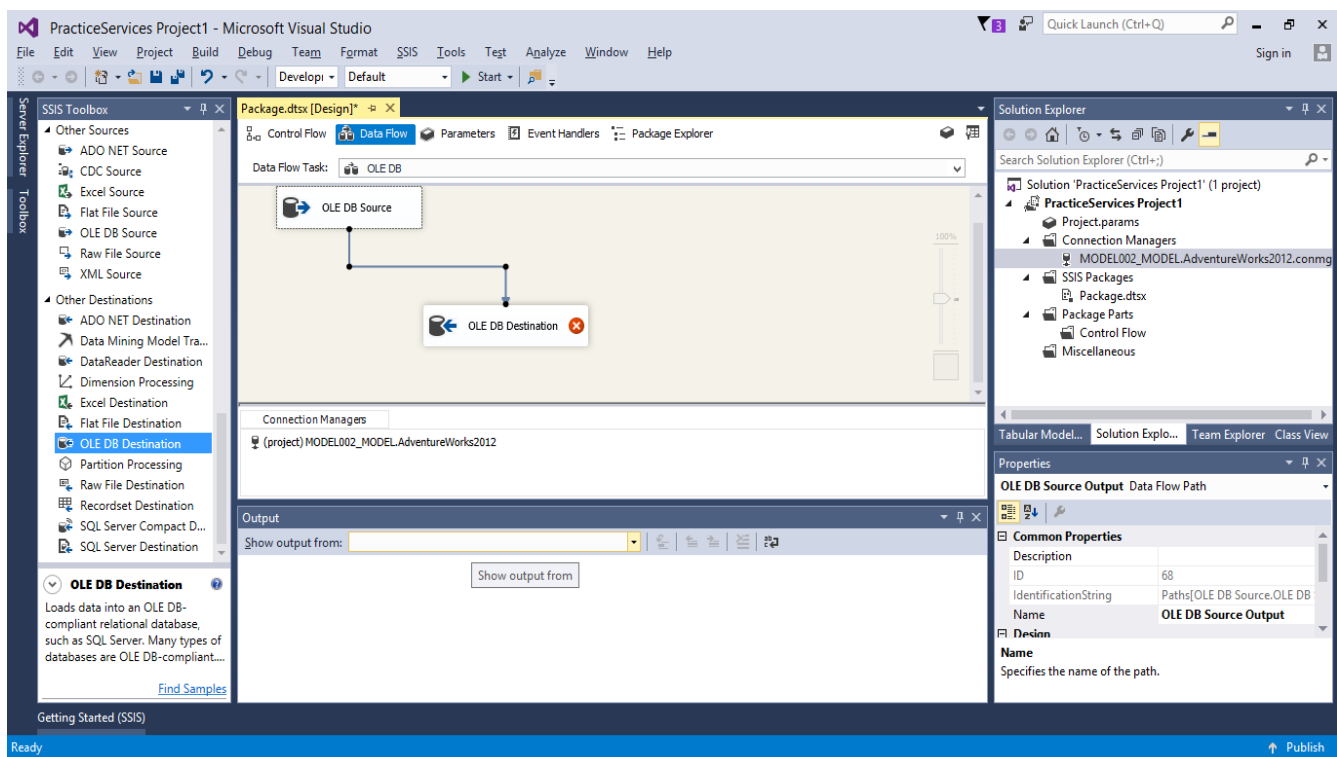


**Step 15: Double click on OLE DB source → OLE DB Source Editor appears→ click on New to add connection manager.**

**Select [Sales].[Store] table from drop down → ok**

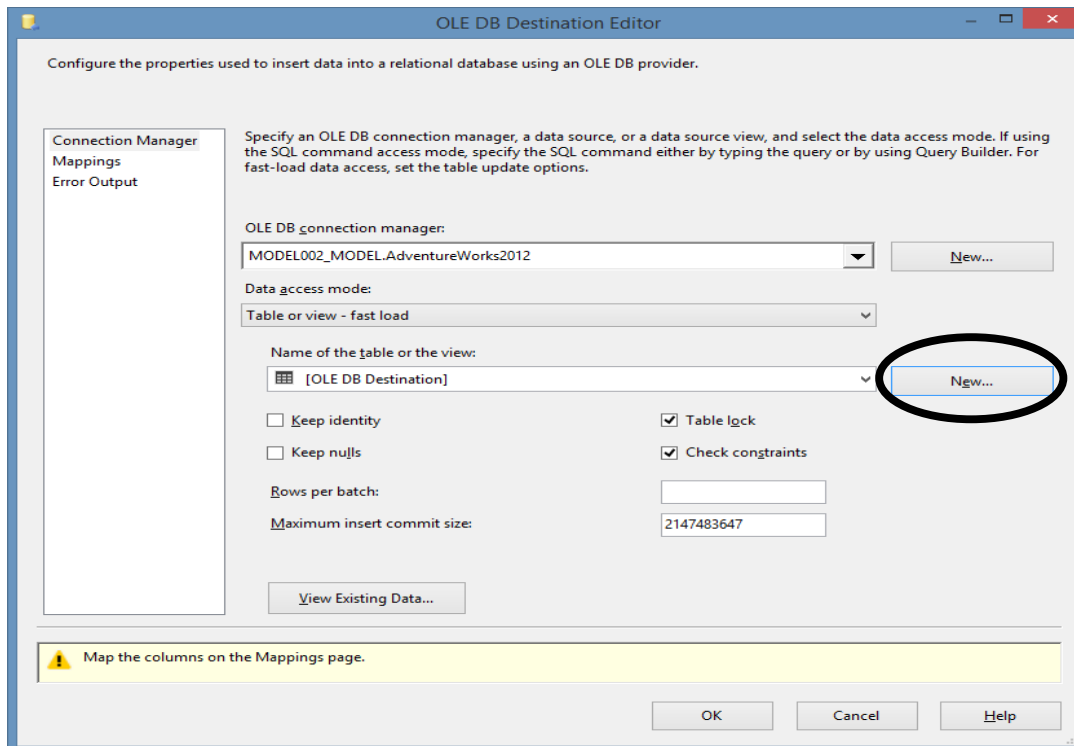


**Step 16: Drag ole db destination in data flow tab and connect both**



## Step 17: Double click on OLE DB destination

Click on New to run the query to get [OLE DB Destination] in Name of the table or the view.



OLE DB Destination Editor

Configure the properties used to insert data into a relational database using an OLE DB provider.

Connection Manager: MODEL002\_MODEL.AdventureWorks2012

Data access mode: Table or view - fast load

Name of the table or the view: [OLE DB Destination] **New...**

☐ Keep identity ☒ Table lock

☐ Keep nulls ☒ Check constraints

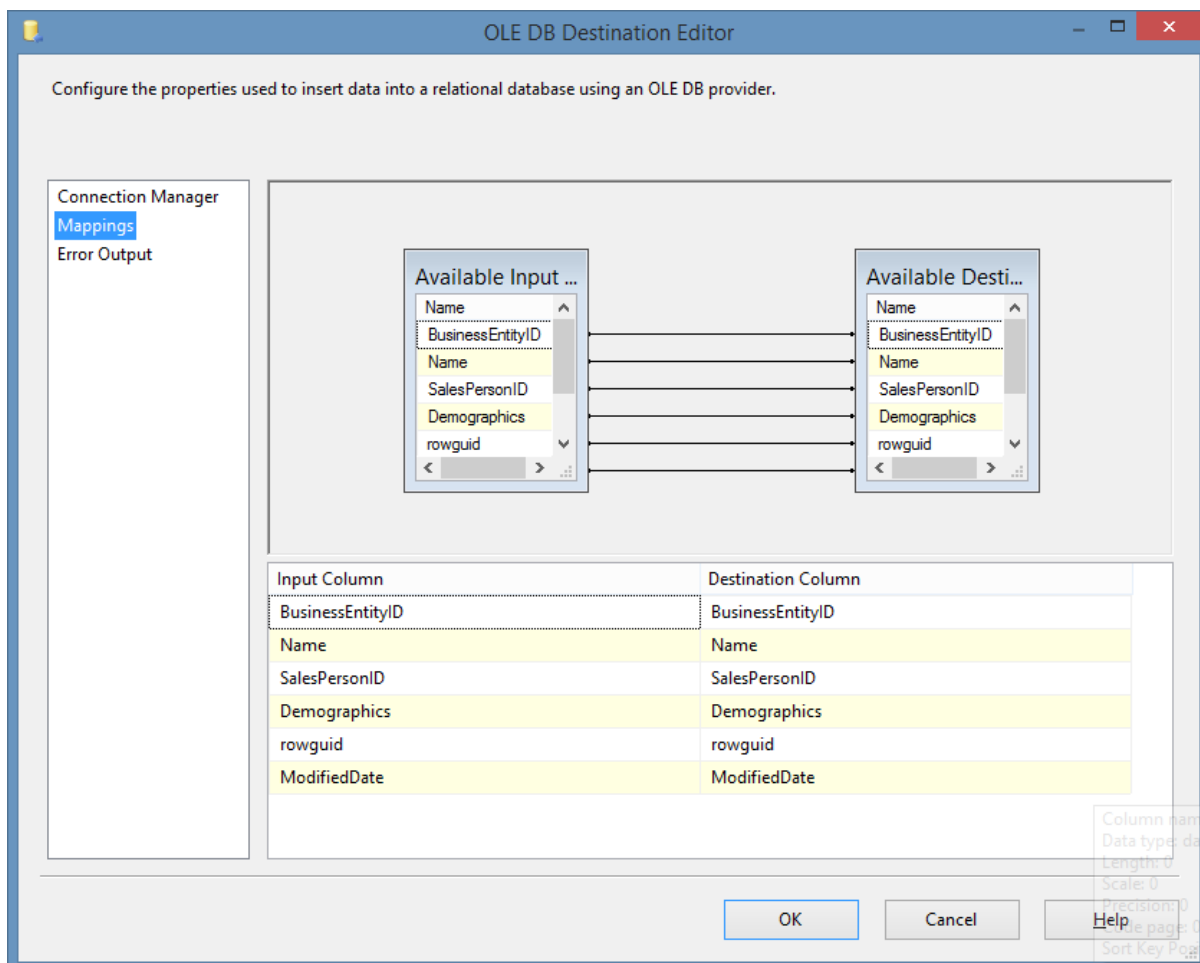
Rows per batch:

Maximum insert commit size: 2147483647

View Existing Data...

Map the columns on the Mappings page.

OK Cancel Help



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

Available Input ...

Name
BusinessEntityID
Name
SalesPersonID
Demographics
rowguid

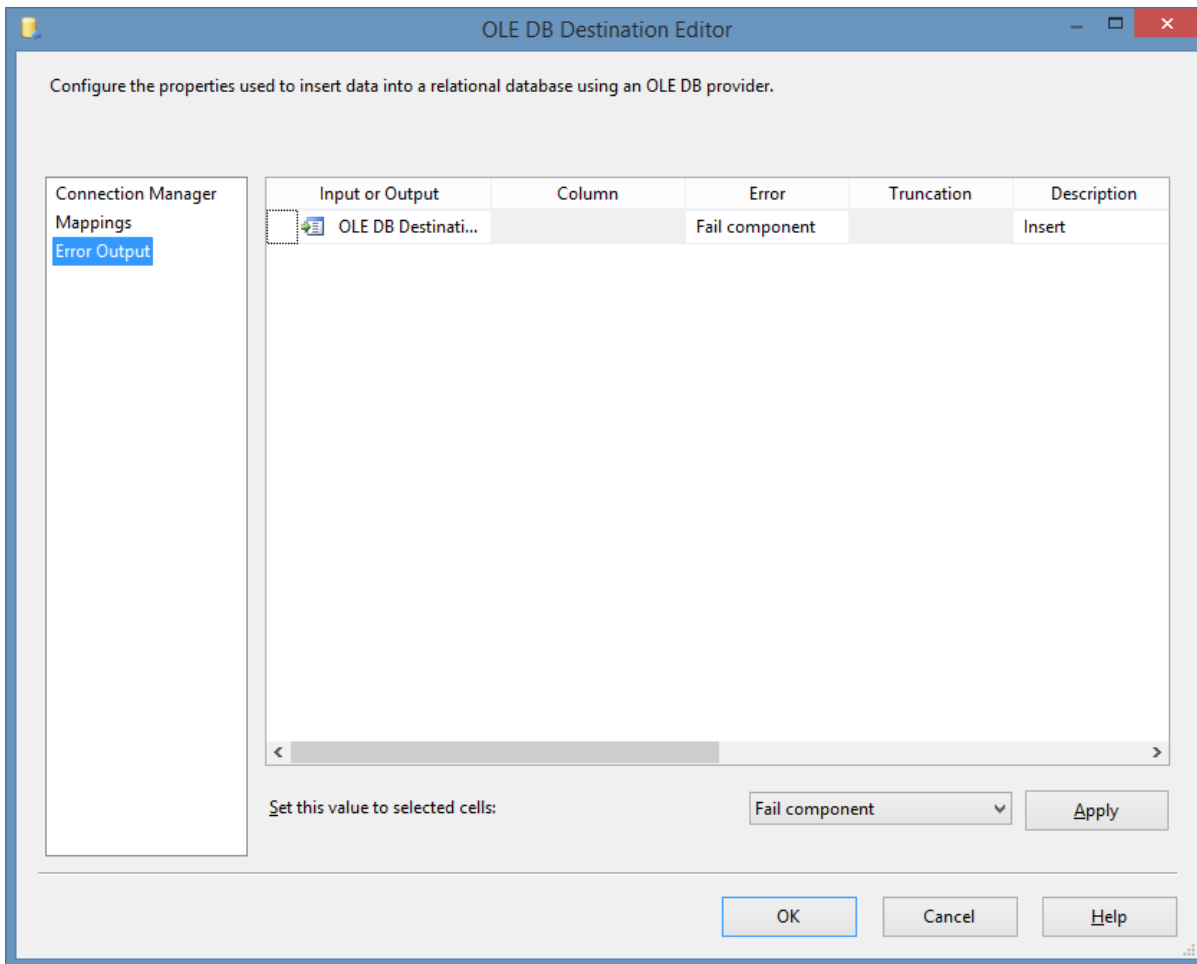
Available Desti...

Name
BusinessEntityID
Name
SalesPersonID
Demographics
rowguid

Input Column	Destination Column
BusinessEntityID	BusinessEntityID
Name	Name
SalesPersonID	SalesPersonID
Demographics	Demographics
rowguid	rowguid
ModifiedDate	ModifiedDate

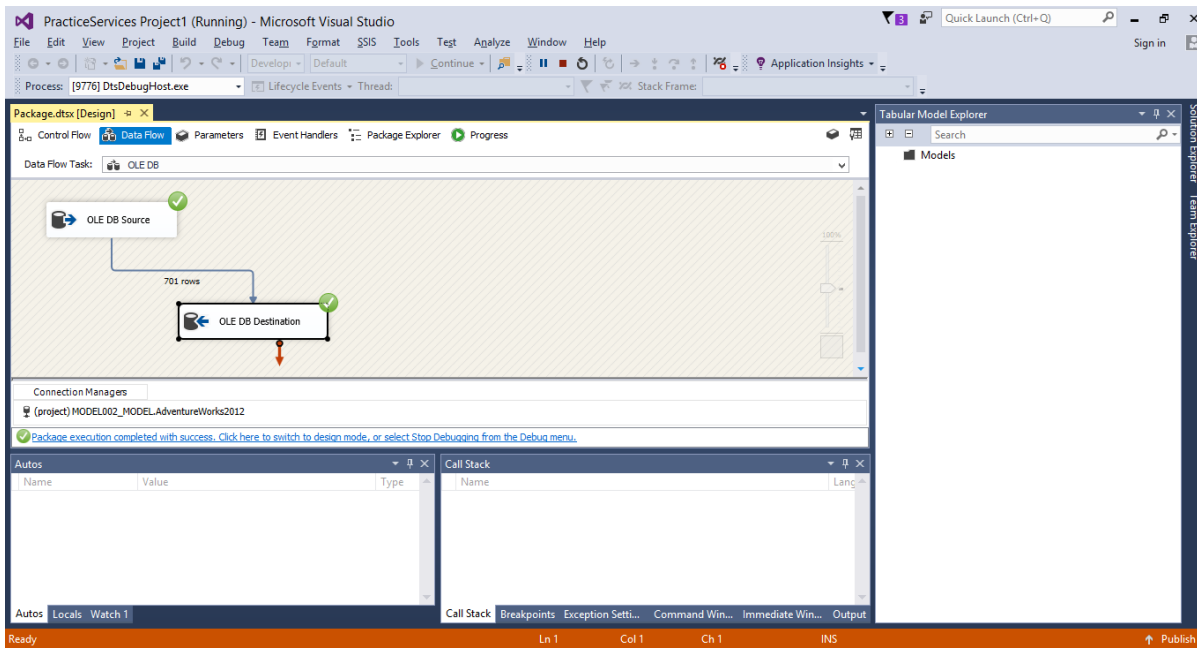
Column name  
Data type: data  
Length: 0  
Scale: 0  
Precision: 0  
Code page: 0  
Sort Key Page

OK Cancel Help



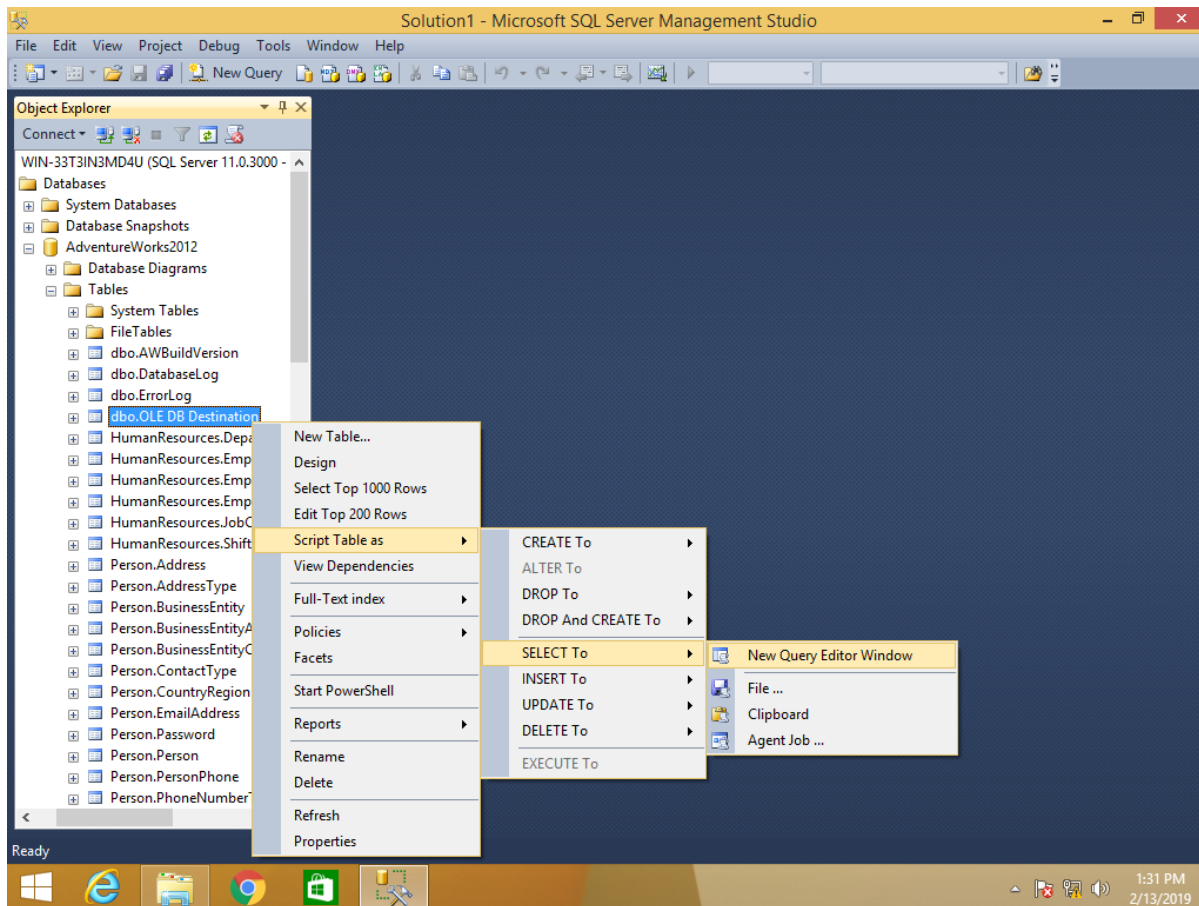
Click on ok

**Step 18: Click on start.**



## Step 19: Go to SQL Server Management Studio

In database tab → Adventureworks → Right click on [dbo].[OLE DB Destination] → Scrip Table as → SELECT To → New Query Editor Window



## Step 20: Execute following query to get output.

USE [AdventureWorks2012]

GO

SELECT [BusinessEntityID]

, [Name]

, [SalesPersonID]

, [Demographics]

, [rowguid]

, [ModifiedDate]

FROM [dbo].[OLE DB Destination]

GO



SQLQuery5.sql - MODEL002\MODELAdventureWorks2012 (MODEL002\Student (52)) - Microsoft SQL Server Management Studio

File Edit View Query Project Debug Tools Window Help

AdventureWorks2012 | Execute | Debug

Object Explorer

- Tables
  - System Tables
  - FileTables
  - dbo.AWBuildVersion
  - dbo.DatabaseLog
  - dbo.ErrorLog
  - dbo.OLE DB Destination
  - HumanResources.Department
  - HumanResources.Employee
  - HumanResources.EmployeeHistory
  - HumanResources.JobCandidate
  - HumanResources.Shift
  - Person.Address
  - Person.AddressType
  - Person.BusinessEntity
  - Person.BusinessEntityAddress
  - Person.ContactType
  - Person.CountryRegion
  - Person.EmailAddress
  - Person.Password
  - Person.Person
  - Person.PersonPhone
  - Person.PhoneNumber
  - Person.StateProvince
  - Production.BillOfMaterials
  - Production.Culture

SQLQuery5.sql - MODEL002\Student (52)

```
USE [AdventureWorks2012]
GO

SELECT [BusinessEntityID]
      ,[Name]
      ,[SalesPersonID]
      ,[Demographics]
      ,[rowguid]
      ,[ModifiedDate]
FROM [dbo].[OLE DB Destination]
GO
```

100 %

Results Messages

	BusinessEntityID	Name	SalesPersonID	Demographics	rowguid
1	292	Next-Door Bike Store	279	<StoreSurvey xmlns="http://schemas.microsoft.com...">	A22517E3-848D-4EBE-B9D9-74...
2	294	Professional Sales and Service	276	<StoreSurvey xmlns="http://schemas.microsoft.com...">	B50CA50B-C601-4A13-B07E-2Cf...
3	296	Riders Company	277	<StoreSurvey xmlns="http://schemas.microsoft.com...">	337C3688-1339-4E1A-A08A-B54...
4	298	The Bike Mechanics	275	<StoreSurvey xmlns="http://schemas.microsoft.com...">	7894F278-F0C8-4D16-BD75-213...
5	300	Nationwide Supply	286	<StoreSurvey xmlns="http://schemas.microsoft.com...">	C3FC9705-A8C4-4F3A-9550-EB2...
6	302	Area Bike Accessories	281	<StoreSurvey xmlns="http://schemas.microsoft.com...">	368BE6D-30E5-498B-9486-711...
7	304	Bicycle Accessories and Kits	283	<StoreSurvey xmlns="http://schemas.microsoft.com...">	35F40636-5105-4905-969E-27E...
8	306	Clamps & Brackets Co.	275	<StoreSurvey xmlns="http://schemas.microsoft.com...">	64D06BFC-D060-405C-8C60-C0f...
9	308	Valley Bicycle Specialists	277	<StoreSurvey xmlns="http://schemas.microsoft.com...">	59386B0C-652E-4668-B44B-4E1...

Query executed successfully. | MODEL002\MODEL (11.0 RTM) | MODEL002\Student (52) | AdventureWorks2012 | 00:00:06 | 701 rows

Output

Ready

Ln 1 Col 1 Ch 1 INS

Properties

Current connection parameters

Aggregate Status

- Connection failure
- Elapsed time: 00:00:06.820
- Finish time: 15-01-2019 13:15:46
- Name: MODEL002\MODEL
- Rows returned: 701
- Start time: 15-01-2019 13:15:39
- State: Open

Connection

Connection name: MODEL002\MODEL (MODEL002\Student)

Connection Details

- Connection elapsed: 00:00:06.820
- Connection finish: 15-01-2019 13:15:46
- Connection start: 15-01-2019 13:15:39
- Connection state: Open
- Display name: MODEL002\MODEL
- Login name: MODEL002\Student
- Server name: MODEL002\MODEL
- Server version: 11.0.2100
- Session Tracing ID: 52
- SPID: 52

Name

The name of the connection.