

```
print("SQL Server Integration Services")
SQL Server Integration Services
print("SSIS:-Built to be a Fast and Flexible Data Warehousing Tool")
SSIS:-Built to be a Fast and Flexible Data Warehousing Tool
print("Business intelligence (BI) Developer:->The Technical that Collects, Stores and Analyze Company Data To Provide Meaningful Business Insights..")
Business intelligence (BI) Developer:->The Technical that Collects, Stores and Analyze Company Data To Provide Meaningful Business Insights..
```

الرجل الفني الذي يجمع بيانات الشركة ويخزنها ويحللها <-:(BI) مطور ذكاء الأعمال (". ل توفير رؤى تجارية مفيدة

الرجل الفني الذي يجمع بيانات الشركة ويخزنها ويحللها لتوفير <-:(BI) مطور ذكاء الأعمال . رؤى تجارية مفيدة

```
print("SSIS An ETL Tool To Achieve Data Integration.")
SSIS An ETL Tool To Achieve Data Integration.
print("SSIS a Data Warehousing tool used for Data Extraction, Transformation, and Loading (ETL).")
SSIS a Data Warehousing tool used for Data Extraction, Transformation, and Loading (ETL).
print("ITI Business Intelligence")
ITI Business Intelligence
```

يتضمن الذكاء التجاري عمليات جمع البيانات وتنظيمها وتحليلها وتحويلها إلى معلومات مفيدة يمكن فهمها واستخدامها بشكل سهل وفعال. يهدف الذكاء التجاري إلى دعم عملية اتخاذ القرار من خلال توفير البيانات والإجابات عن الأسئلة وتقديم التحليلات والتوقعات لدعم القرارات المؤسسية.

```
print("1-What is business Intelligence, SQL Server Integration Service-SSIS")
1-What is business Intelligence, SQL Server Integration Service-SSIS
print("Market Analysis")
Market Analysis
print("Data Quality")
```

```
جودة البيانات Data Quality
print("Data Integration")
تكامل البيانات Data Integration
print("Reports")
Reports
print("Analytical Reports (Financial Analysis or Market Analysis)")
Analytical Reports (Financial Analysis or Market Analysis)
```

التقارير التحليلية (التحليل المالي أو تحليل السوق)

```
print("Dashboards & Dashboard Design ")
Dashboards & Dashboard Design
print("Working With Very Large Data")
Working With Very Large Data
print("Historical Data")
Historical Data
print("Predict To Data")
Predict To Data
print("Predictive Analytics")
Predictive Analytics
print("Data Mining")
Data Mining
print("Data Mining in BI")
Data Mining in BI
print("Data Mining Techniques")
Data Mining Techniques
print("Data Mining:-Forecast Future Market Trends & Make Business-Critical Decisions.")
Data Mining:-Forecast Future Market Trends & Make Business-Critical Decisions.
```

```
استخراج البيانات: - توقع اتجاهات السوق المستقبلية واتخاذ قرارات الأعمال ("الحاسمة")
print("Extract, Transform, and Load (ETL)")
Extract, Transform, and Load (ETL)
print("Data warehouse")
Data warehouse
print("This Is The Concepts Business Intelligence Sciences")
This Is The Concepts Business Intelligence Sciences
print("$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$")
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
print("The Four Key Concepts of Business Intelligence (BI) are Data Collection, Analysis, Visualization, and Decision-Making.")
The Four Key Concepts of Business Intelligence (BI) are Data Collection, Analysis, Visualization, and Decision-Making.
print("Business Intelligence focuses on Analyzing Past Events")
Business Intelligence focuses on Analyzing Past Events
print("While Data Science Goal to Predict Future Trends الاتجاهات المستقبلية")
While Data Science Goal to Predict Future Trends الاتجاهات المستقبلية
print("$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$")
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
print("Data Source")
Data Source
print("files")
files
print("Excel")
Excel
print("DB")
```

```
DB
print("Orcale,SQL,MySQL")
Orcale,SQL,MySQL
print("<>XML")
<>XML
print("Binary Files")
Binary Files
print("Analysis to Get Highest Revenue")
Analysis to Get Highest Revenue
print("Integration")اندماج
Integrationاندماج
print("Data Sources Integration")
Data Sources Integration
print("Data integration is the process of combining data from various sources into One")
Data integration is the process of combining data from various sources into One
("تكامل البيانات هو عملية دمج البيانات من مصادر مختلفة في مصدر واحد")
تكامل البيانات هو عملية دمج البيانات من مصادر مختلفة في مصدر واحد
print("Data integration using ETL")
Data integration using ETL
print("Convert From Format to other Formats")
Convert From Format to other Formats
print("ETL Tools Make Extract Transform Load")
ETL Tools Make Extract Transform Load
print("Collect Data Than Put Data into Data Warehouse")
Collect Data Than Put Data into Data Warehouse
print("Dataware House is Denormalized Database")
Dataware House is Denormalized Database
```

```
print("Dataware House is De-Normalized Database")
Dataware House is De-Normalized Database
print("Dataware House is Historical Database")
Dataware House is Historical Database
print("Dataware House has High Performance Less Joins")
Dataware House has High Performance Less Joins
print("Data Warehouse is High Performance Because Less Joins")
Data Warehouse is High Performance Because Less Joins
print("DWH for Select and Analysis and Reports Not{Insert Update Delete}")
DWH for Select and Analysis and Reports Not{Insert Update Delete}
print("OLTP is Volatile Data oltp " عبارة عن بيانات متغيرة")
عبارة عن بيانات متغيرة oltp
print("OLAP is Non Volatile Data OLAP " عبارة عن بيانات غير متغيرة")
عبارة عن بيانات غير متغيرة OLAP
print("DB Make An entity relationship diagram (ERD)")
DB Make An entity relationship diagram (ERD)
print("DWH Make A Star Schema")
DWH Make A Star Schema
print("Make DWH to Make Analysis")
Make DWH to Make Analysis
print("Build DWH To Make Reports for Managers " تقارير للمديرين")
تقارير للمديرين Build DWH To Make Reports for Managers
print("Managers Care About Aggregate Values & Measures")
Managers Care About Aggregate Values & Measures
print("DWH For Performance [Select]")
DWH For Performance [Select]
print("First Thing What Measures we want Calculate")
```

```
First Thing What Measures we want Calculate
print("Make Fact Table & Calculate Measures")

Make Fact Table & Calculate Measures
print("Make Dimension To Calculate Measure per Dimension")
Make Dimension To Calculate Measure per Dimension
print("TotalSales per Product Dim")
TotalSales per Product Dim
print("TotalSales per Branch Dim")
TotalSales per Branch Dim
print("Date over time")
Date over time
print("DWH is Historical Data Must have Date Dimension")
DWH is Historical Data Must have Date Dimension
print("Data Warehouse Must Have Date Dimension")
Data Warehouse Must Have Date Dimension
print("Measures Per Date Dimension")
Measures Per Date Dimension
print("As TotalSales per Date")
As TotalSales per Date
print("مستوى التفاصيل (" + "مستوى التفاصيل")
Level of Granularity
print("الوصول الى التفاصيل اكثرا" + "الوصول الى التفاصيل اكثرا")
Measures Per Date and Time
print("Fact Table Have Only Foreign Keys and Measures")
Fact Table Have Only Foreign Keys and Measures
print("A Data Mart is a Subset of a DataWarehouse")
A Data Mart is a Subset of a DataWarehouse
print("DWH come From ETL Package")
```



```
print("1>>Prediction-A-Forecast.")
print("2>>Discover Hidden Relationships.")
print("3>>Classification.")

1>>Prediction-A-Forecast.
2>>Discover Hidden Relationships.
3>>Classification.

print("Important Areas In BI")

Important Areas In BI

print("1>>Integration تجميع البيانات")
1>>Integration تجميع البيانات

print("2>>Have Historical Data to Analysis")
2>>Have Historical Data to Analysis

print("3>>Finally Make A Reports")
3>>Finally Make A Reports

print("This is a Concept of BI")
This is a Concept of BI

print("3 Solutions For BI")

3 Solutions For BI

print("SSIS ETL Tool with SQL Server")
print("SSAS OLAP Cubes Tool With Sql Server")
print("SQL Server Reporting Services (SSRS)")

SSIS ETL Tool with SQL Server
SSAS OLAP Cubes Tool With Sql Server
SQL Server Reporting Services (SSRS)

print("Top Companies in BI")

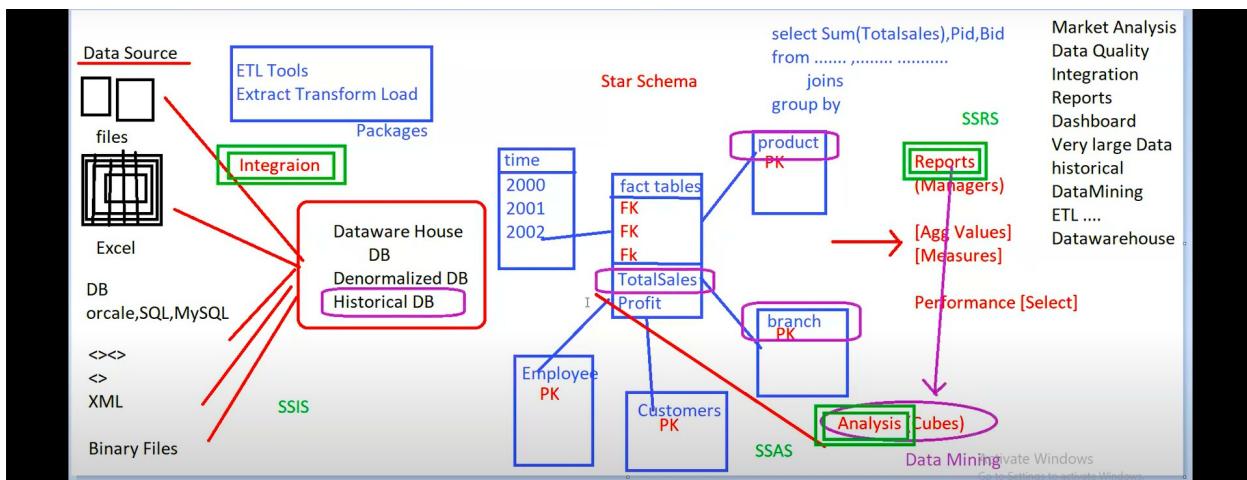
Top Companies in BI

print("1>>MicroSoft")
print("2>>IBM")

1>>MicroSoft
2>>IBM

print("Business Intelligence Cycle?")

Business Intelligence Cycle?
```



```
print("$$"*30)

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

print("BI Some Of Tools Goal is :-")
print("ETL Integration")
print("Store and Analysis Data")
print("Help Make Better Decisions Making")

BI Some Of Tools Goal is :-
ETL Integration
Store and Analysis Data
Help Make Better Decisions Making

print("-----")
1>>Forecast Future results.
2>>BI Leads To:-
*fact-based decision Making.
*"Single version of The Truth"
3>>BI includes Reporting and Analytics.
""")

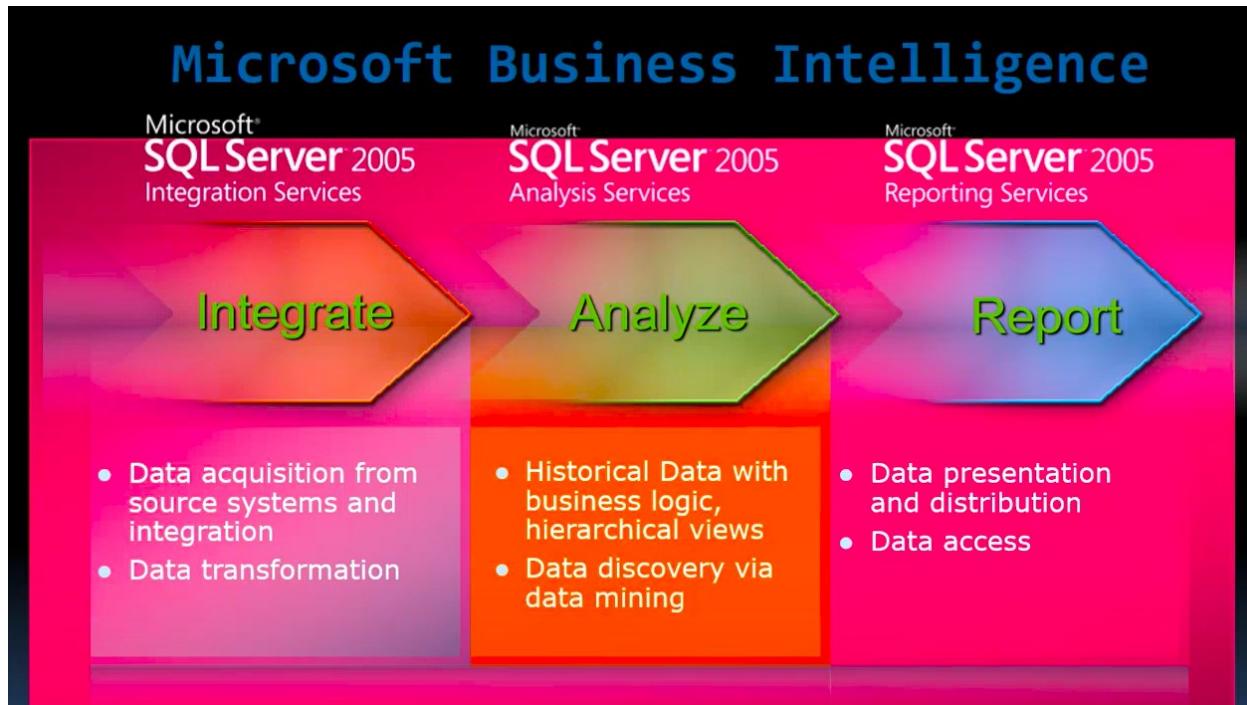
-----
1>>Forecast Future results.
2>>BI Leads To:-
*fact-based decision Making.
*"Single version of The Truth"
3>>BI includes Reporting and Analytics.

print("Single Point Of Truth")

Single Point Of Truth

print("DWH Performance Very High Because We Make Data
Transformations")
```

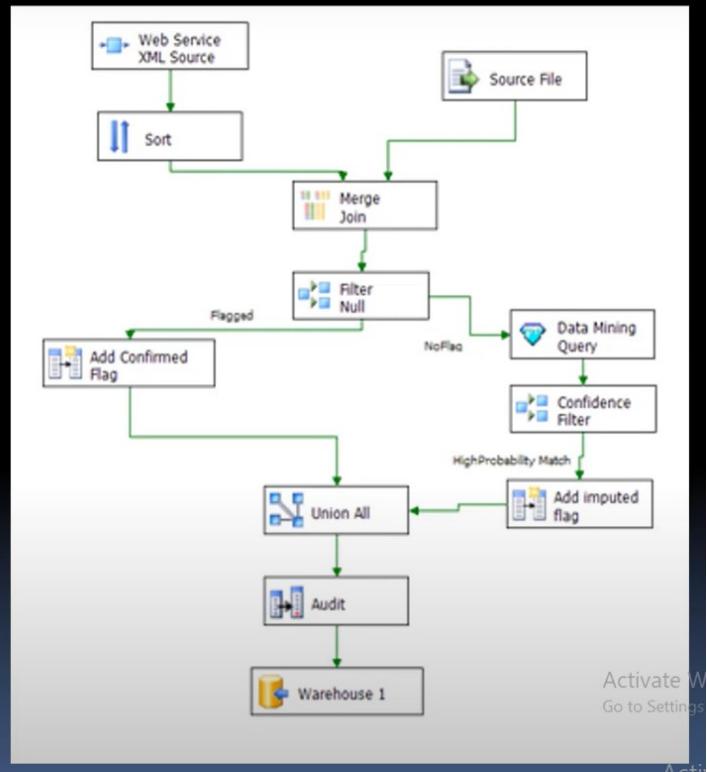
DWH Performance Very High Because We Make Data Transformations



```
print("BI-Steps(Integrate>>Analyze>>Report)")  
BI-Steps(Integrate>>Analyze>>Report)  
print("Business Intelligence Tools | Microsoft Power BI")  
Business Intelligence Tools | Microsoft Power BI  
"""  
Implementation of BI  
BI Layers:-  
1>>Data Sources.  
2>>Data Integration.  
3>>Data Storage.  
4>>Data Analysis.  
5>>Data Presentation.  
"""  
'\nImplementation of BI\nBI Layers:-\n1>>Data Sources.\n2>>Data Integration.\n3>>Data Storage.\n4>>Data Analysis.\n5>>Data Presentation.\n'  
print("SSIS ETL Packages")  
SSIS ETL Packages
```

SSIS Example

- A new Microsoft SQL Server Business Intelligence application
- The platform for a new generation of high performance data integration technologies



```
print("Packege and Tasks")
Packege and Tasks
print("OLTP Databases")
OLTP Databases
print("OLAP Data Warehousing")
OLAP Data Warehousing
print("Data Warehouse is Integrated Data")
Data Warehouse is Integrated Data
print("May be Stored at various degrees of
Summarization(Granularity)")
May be Stored at various degrees of Summarization(Granularity)
print(" التلخيص (التفاصيل) Summarization")
التلخيص (التفاصيل) Summarization
```

Data Warehouse(OLAP) And OLTP

Data Warehouse	OLTP
Works with Enterprise Wide information	Works with small pieces of information
Updated on a schedule	Updated in real-time
De-Normalised	Normalised
Large to Very Large Database	Small to Large Database
Read Queries	Update, Insert Queries
Non-Volatile	Volatile Data
Applications that analyse the business	Applications that run the business

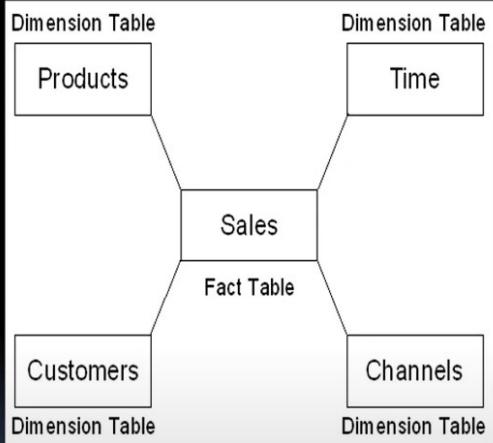
Activate V
Go to Setting

```
print("Data Warehouse is De-Normalized Database")
Data Warehouse is De-Normalized Database
print("DataWarehouse Must Not Edit")
DataWarehouse Must Not Edit
print("$$$"*20)
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
```

OLAP Dimensional Modeling

- Dimensional modeling is the design concept used by many data warehouse designers to build their data warehouse especially when BI is being planned
- Dimensional Modeling is based on the **star schema** with a centralized **fact table** surrounded by smaller **dimensional tables** representing key scientific objects

Star Schema Explained



Dimension table: It is a business entity of the source system.

Example: Time Dimension, Customer Dimension, Product Dimension

Fact table: A central table containing numerical measures and keys relating facts to dimension tables

Example: Profitability

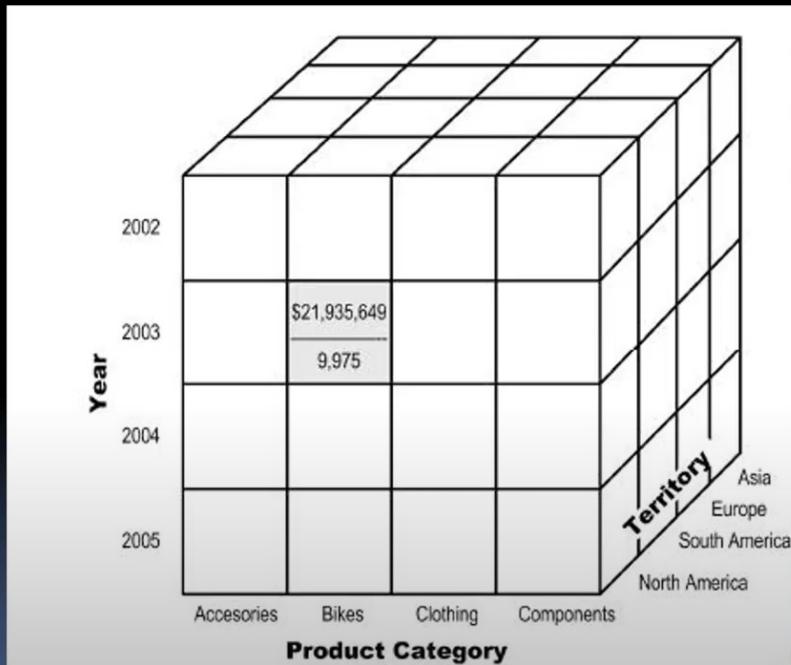
Activate W
Go to Settings

Acti
Go to

“What is a measure?”

```
print("$$$$*20)  
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$  
print("Cube Processing")  
Cube Processing
```

What is Cube?



- Measures
- Dimensions
- Aggregations

```
print("Total Sales Profit To Bikes in 2003 To North America")
```

```
Total Sales Profit To Bikes in 2003 To North America
```

OLAP CUBE



- This is a sample text that you can edit. You can change font (size, color, name).
- This is a sample text that you can edit. You can change font (size, color, name).
- This is a sample text that you can edit. You can change font (size, color, name).

```
print("Cube output All Aggregate results from all Dimensions")  
Cube output All Aggregate results from all Dimensions
```

Data Presentation

- Using Excel pivot tables and more
- Using SQL Server Reporting Services (SSRS)
- Understanding SharePoint 2003/2007 Web parts

```
print("$$$$*20)  
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$  
print("Cubes Make Group Of Pivot Tables")  
Cubes Make Group Of Pivot Tables  
print("$$$$*20)  
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$  
print("What is The Measures")  
What is The Measures  
print("Measures is Aggregations COUNT MAX MIN AVERAGE SUM")  
Measures is Aggregations COUNT MAX MIN AVERAGE SUM  
print("$$$$*20)  
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$  
print("From BI Developer to Data Engineer")  
From BI Developer to Data Engineer  
print("The Data Engineer: كان- BI Developer " )  
The Data Engineer: كان- BI Developer  
print("Adding New Skills To Become Data Engineer")  
Adding New Skills To Become Data Engineer
```

```
print("Learn>>Data Mining")
Learn>>Data Mining
print("Learn>>Big data")
Learn>>Big data
print("Learn MySQL and NoSQL")
Learn MySQL and NoSQL
print("Machine learning Algorithms")
Machine learning Algorithms
print("BI to Data engineering to Data Science & Machine learning")
BI to Data engineering to Data Science & Machine learning
print("Data Scientist>>Data Mining and Predictions to Data Warehouses")
Data Scientist>>Data Mining and Predictions to Data Warehouses
print("Machine learning and Data mining Learn how to Predict Data")
Machine learning and Data mining Learn how to Predict Data
print("Learn How To Extract knowledge from Data")
Learn How To Extract knowledge from Data
print("Data Warehouse Coursera<>IBM Data Warehouse Engineer Professional Certificate")
Data Warehouse Coursera<>IBM Data Warehouse Engineer Professional Certificate
```

BI Developer
Data engineering
Data Scientist & machine learning

```
print("$$$$*20)
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
print("SQL Server Integration Services")
SQL Server Integration Services
print("Use to Make ETL Integration اندماج Make packages")
```

Use to Make ETL Integration اندماج Make packages

```
print("SSIS:-Integrate Data Into Datawarehouse دمج البيانات في مستودع ("البيانات")
```

SSIS:-Integrate Data Into Datawarehouse دمج البيانات في مستودع البيانات

```
print("SSIS")
```

SSIS

SSIS

--used to generate Packages

--Control Flow

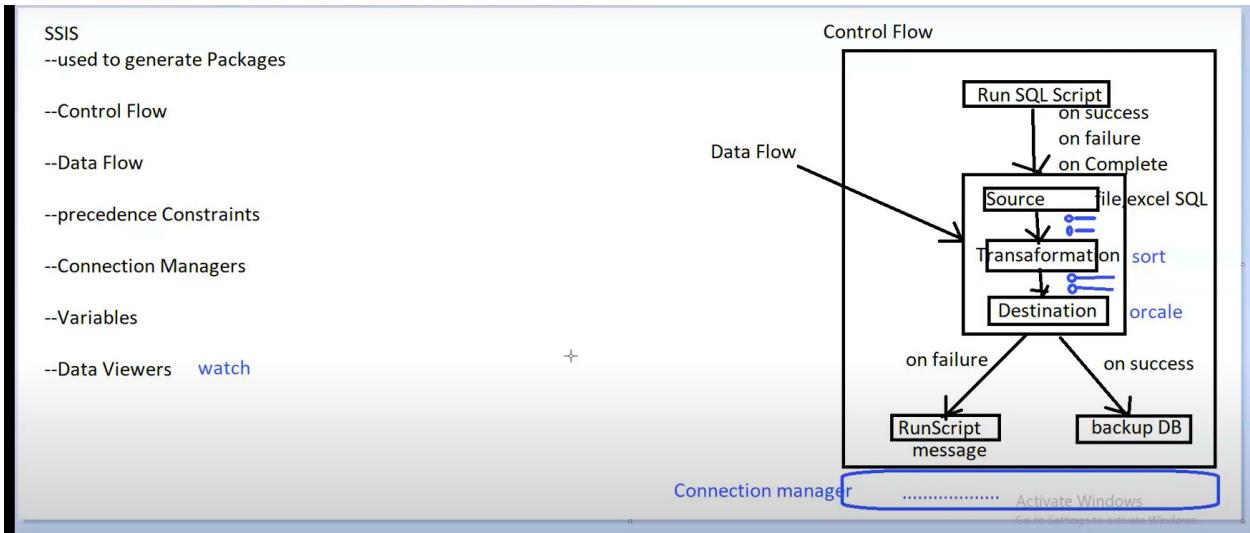
--Data Flow

--precedence Constraints

--Connection Managers

--Variables

--Data Viewers



```

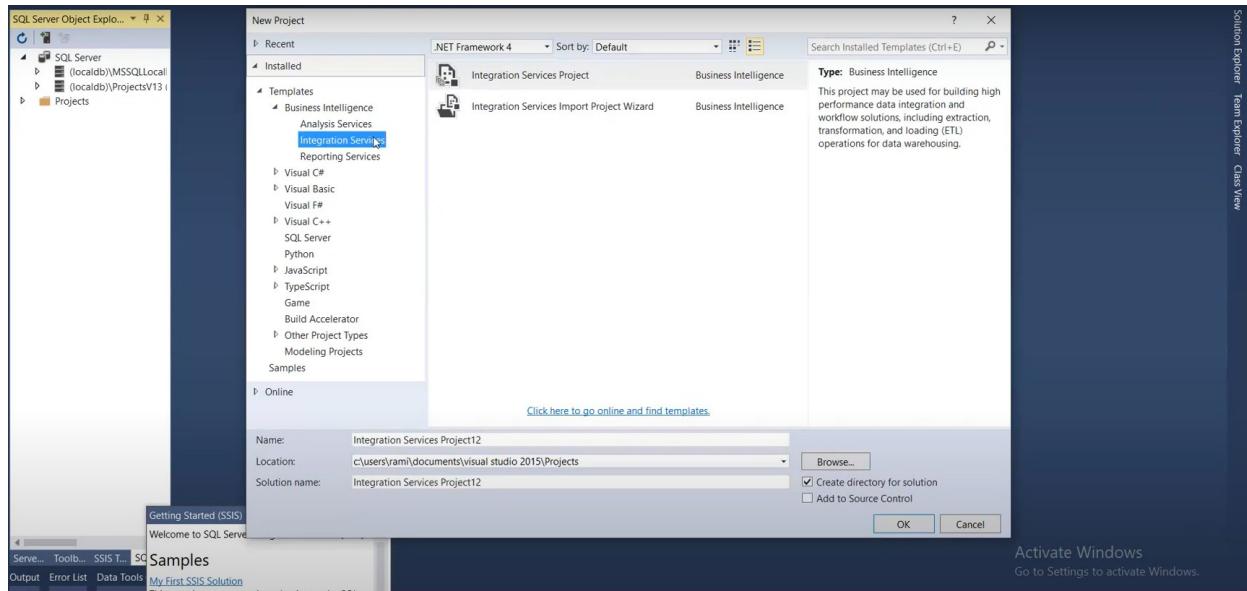
print("اشكال Transformation")
اشكال Transformation
print("SQL Joins,SQL UNION,Sort SQL,Remove Null Values,Calculate
Aggregate Value,")
SQL Joins,SQL UNION,Sort SQL,Remove Null Values,Calculate Aggregate
Value,
print("ETL tool")
ETL tool
print("يتحول البيانات من شكل الى شكل")
يتحول البيانات من شكل الى شكل
print("Destination DWH")
Destination DWH
print("SSIS Can Use To Convert from Excel to XML")
SSIS Can Use To Convert from Excel to XML
print("علي ورق ارسم")
علي ورق ارسم packages
print("SQL Server Data Tools")
SQL Server Data Tools
print("New Project")

```

New Project

```
print("Write Steps")
```

Write Steps



```
print("Integration Services Project>>OK")
```

Integration Services Project>>OK

```
print("Control Flow")
```

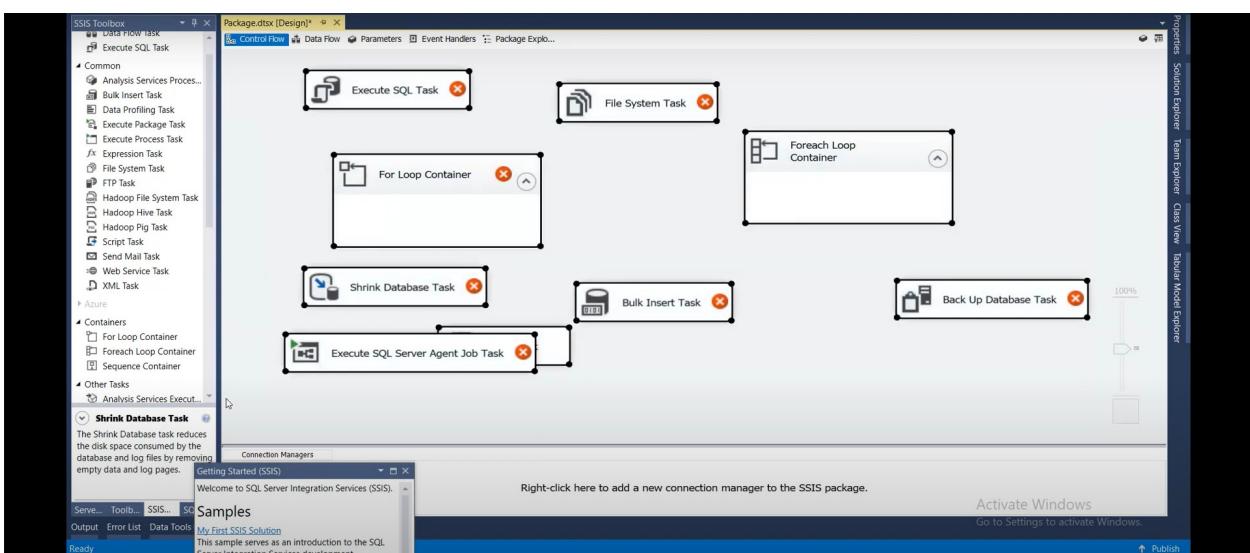
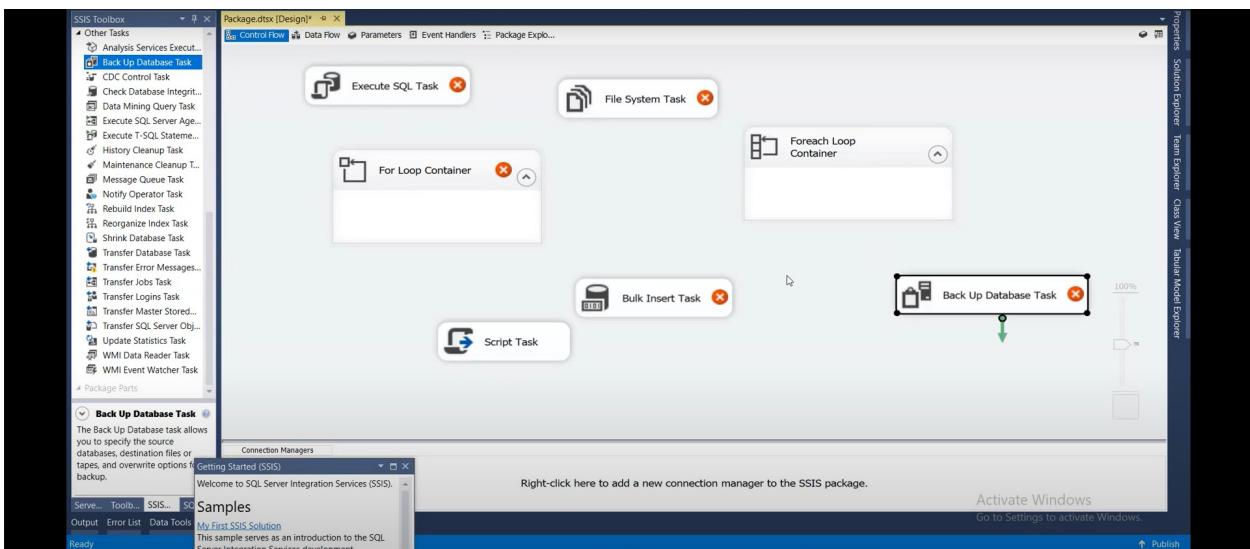
Control Flow

```
print("Control Flow Run Before or After Transformation")
```

Control Flow Run Before or After Transformation

```
print("Make Tasks From Toolbox")
```

Make Tasks From Toolbox



```
print("Make real Examples")
```

Make real Examples

```
print("Execute SQL Task")
```

Execute SQL Task

```
print("All BI Build XML in Background")
```

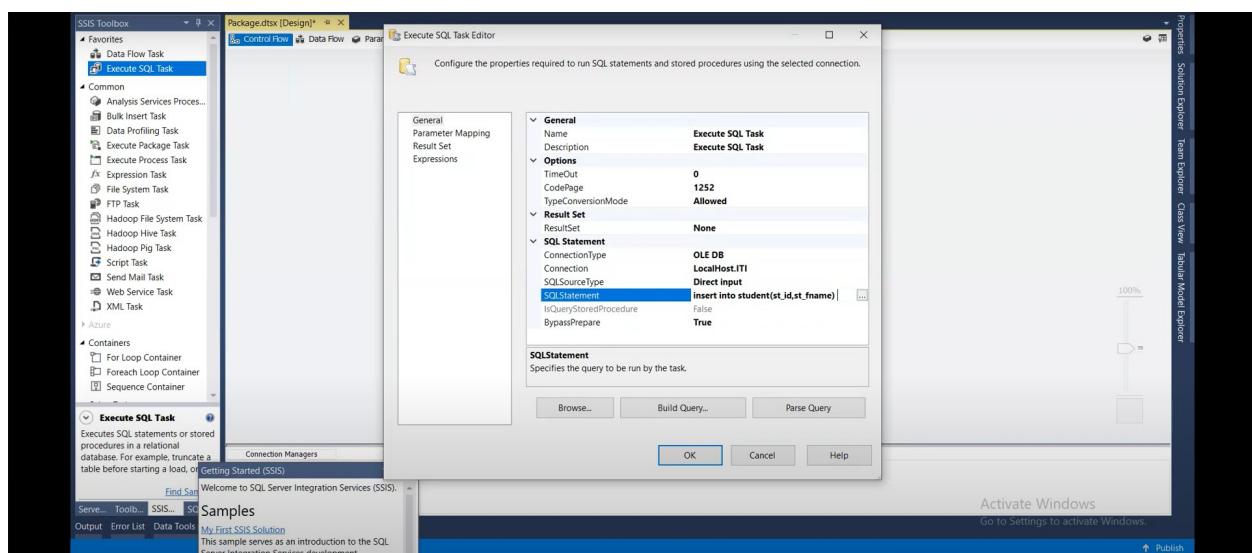
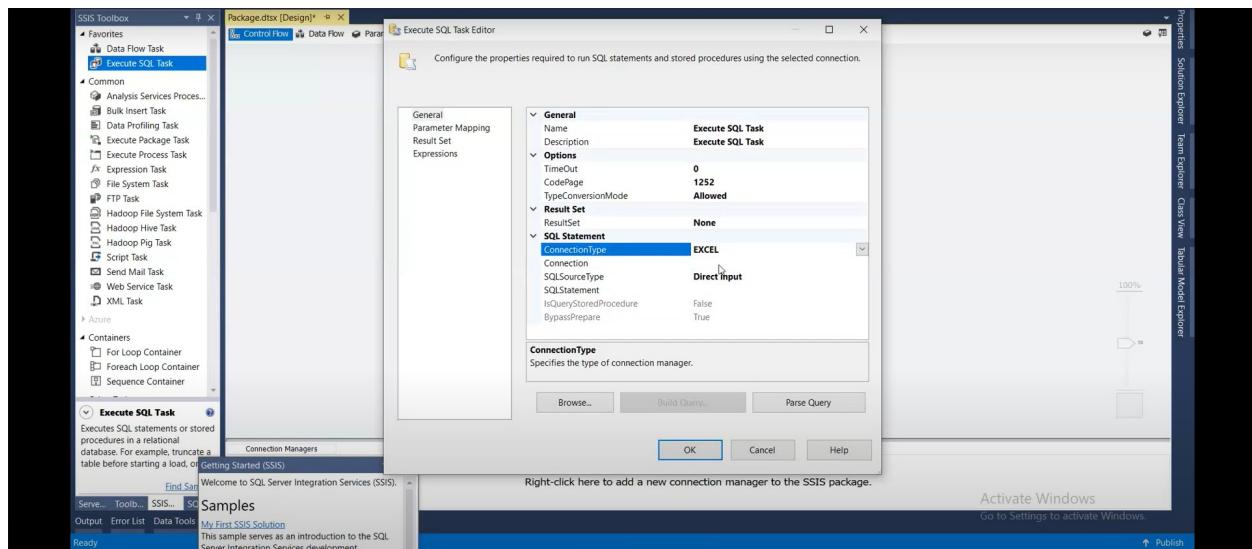
All BI Build XML in Background

```
print("Code XML")
```

Code XML

```
print("SSIS Package.dtsx>>Package.dtsx>>Right Click>>View Code>>XML
Package.dtsx[XML] ")
```

SSIS Package.dtsx>>Package.dtsx>>Right Click>>View Code>>XML Package.dtsx[XML]

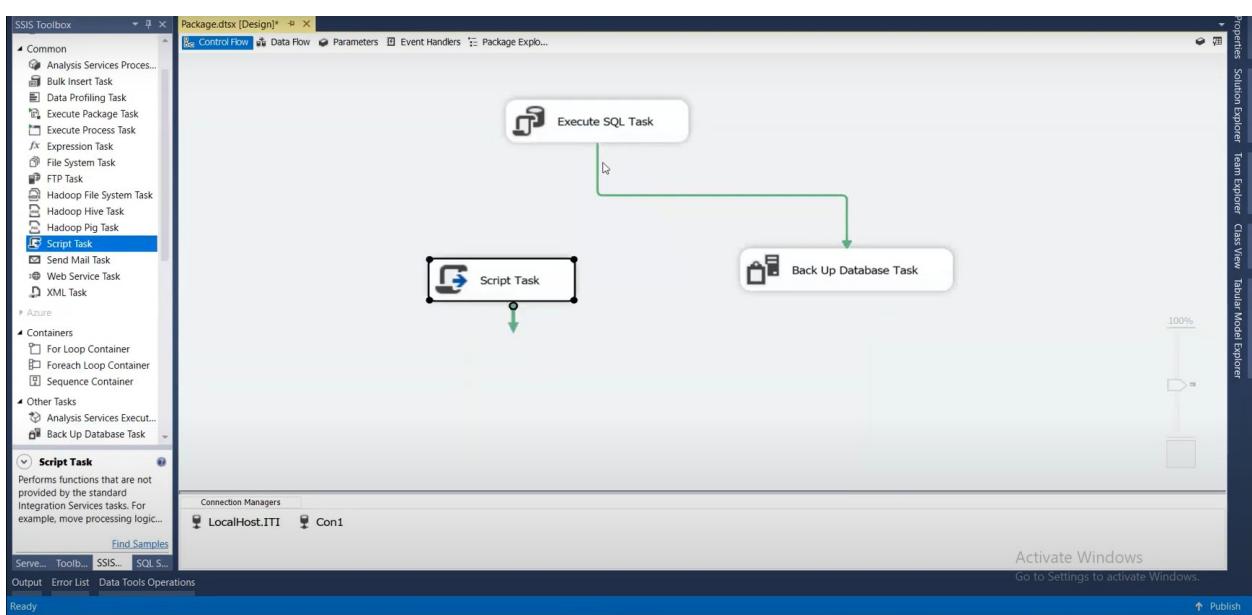
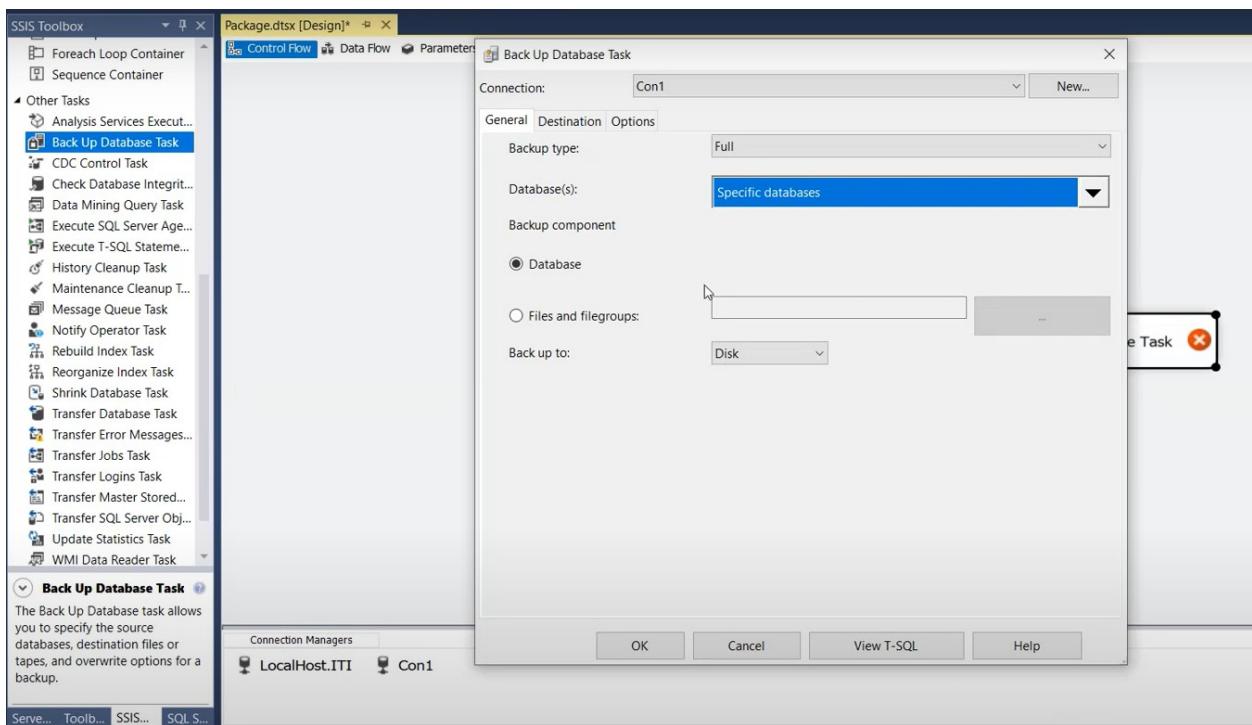


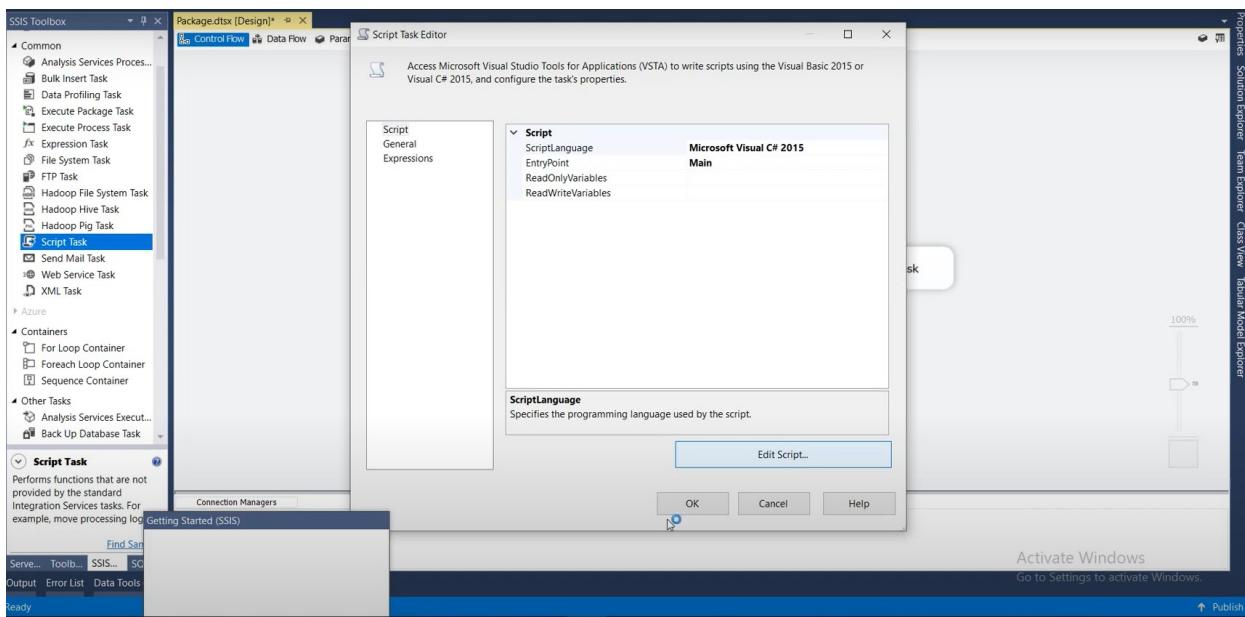
```
print("Back UP:-A copy of SQL Server data that can be used to restore and recover the data after a failure.")
```

Back UP:-A copy of SQL Server data that can be used to restore and recover the data after a failure.

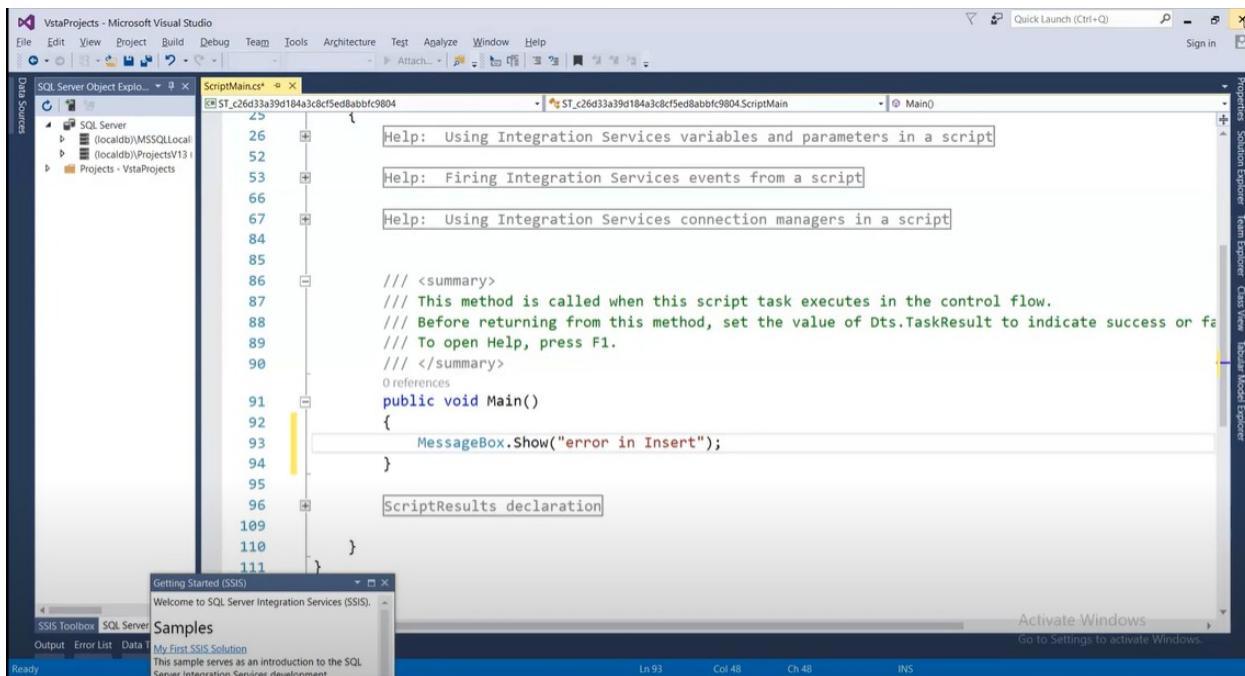
print(" يمكن استخدامها لاستعادة البيانات بعد الفشل SQL Server نسخة من بيانات ")

يمكن استخدامها لاستعادة البيانات بعد الفشل SQL Server نسخة من بيانات .



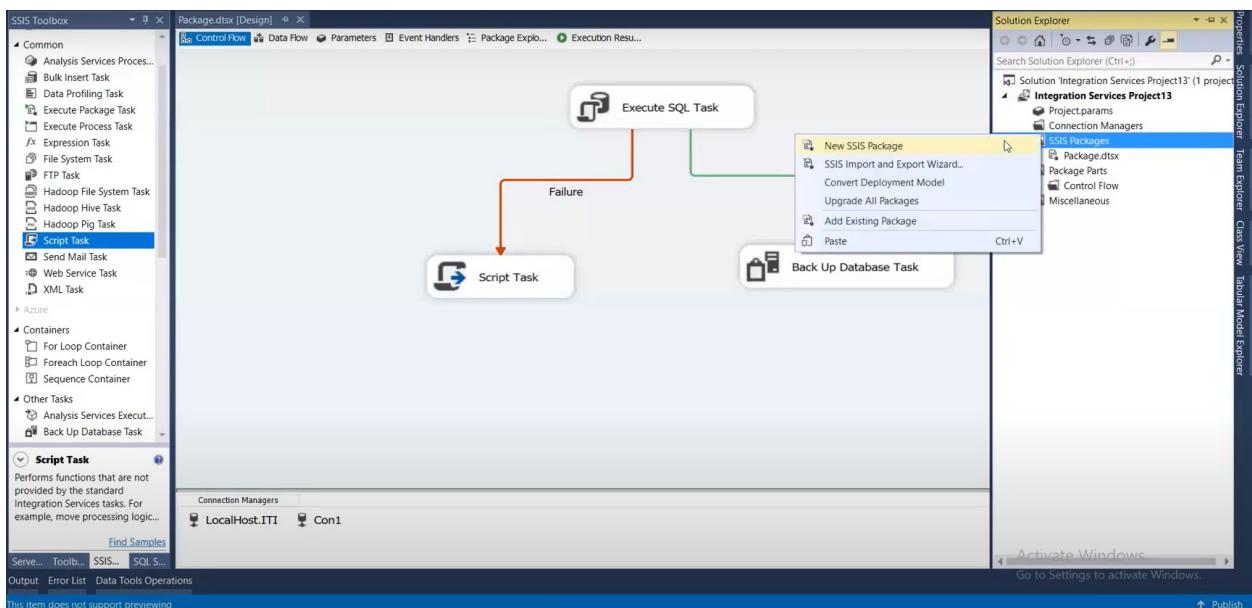
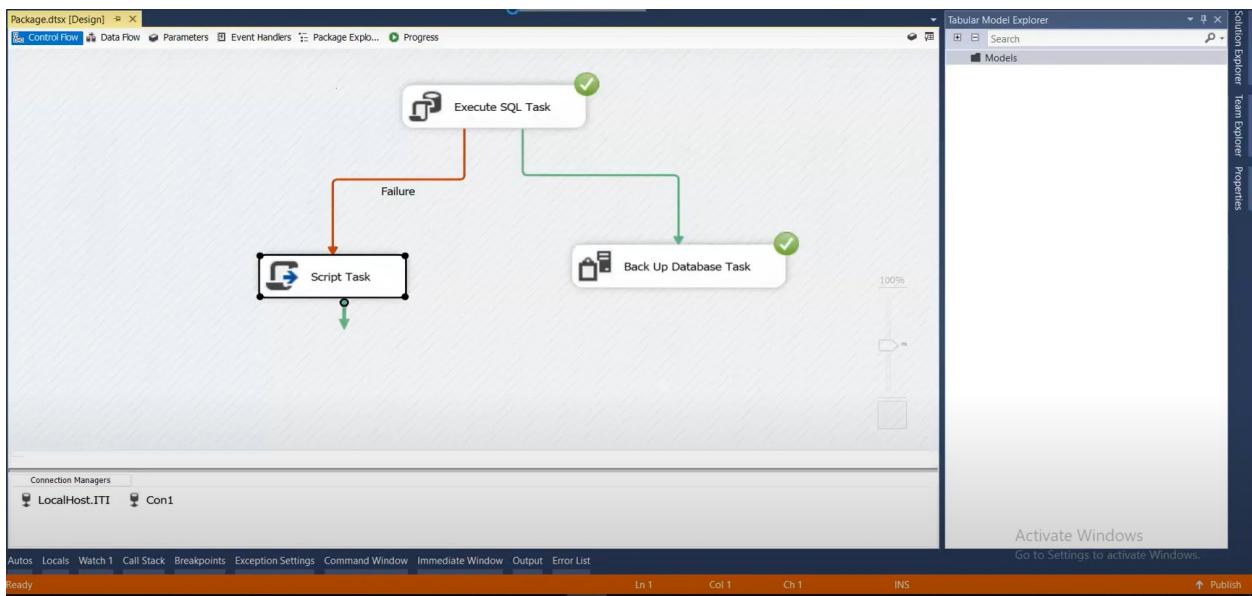


Write C# Code run When on failure



```
print("Run The Package")
```

Run The Package



```

print("DELETE or TRUNCATE")
DELETE or TRUNCATE
print("Bulk Insert Task")
Bulk Insert Task
print("load multiple rows of data into a database Table")
load multiple rows of data into a database Table
print("Execute SQL Task Editor")

```

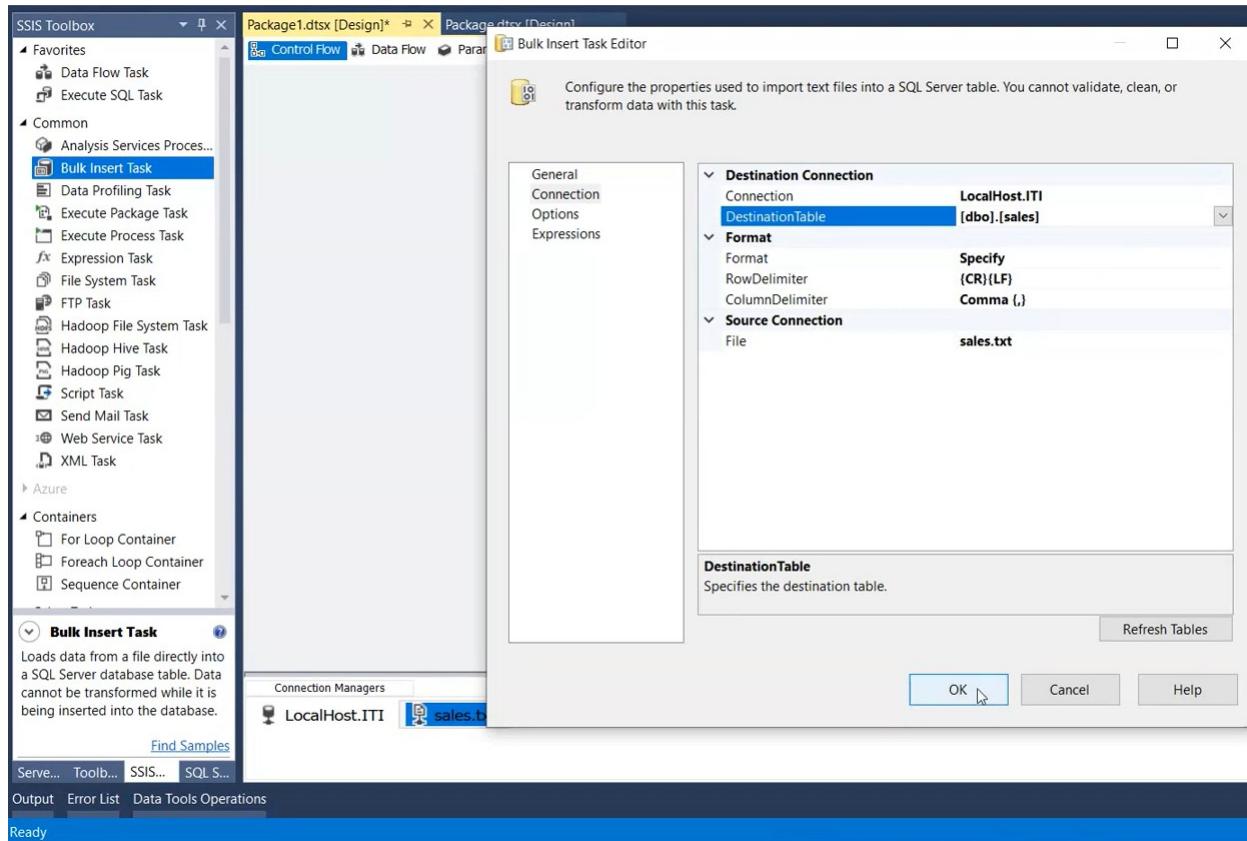
Execute SQL Task Editor

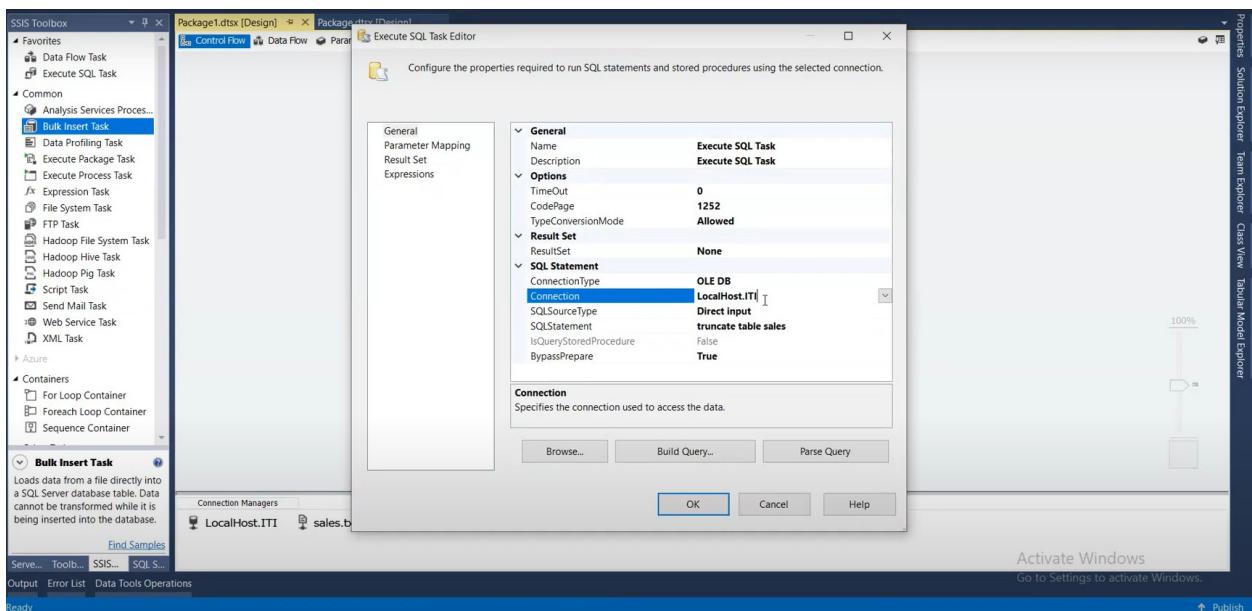
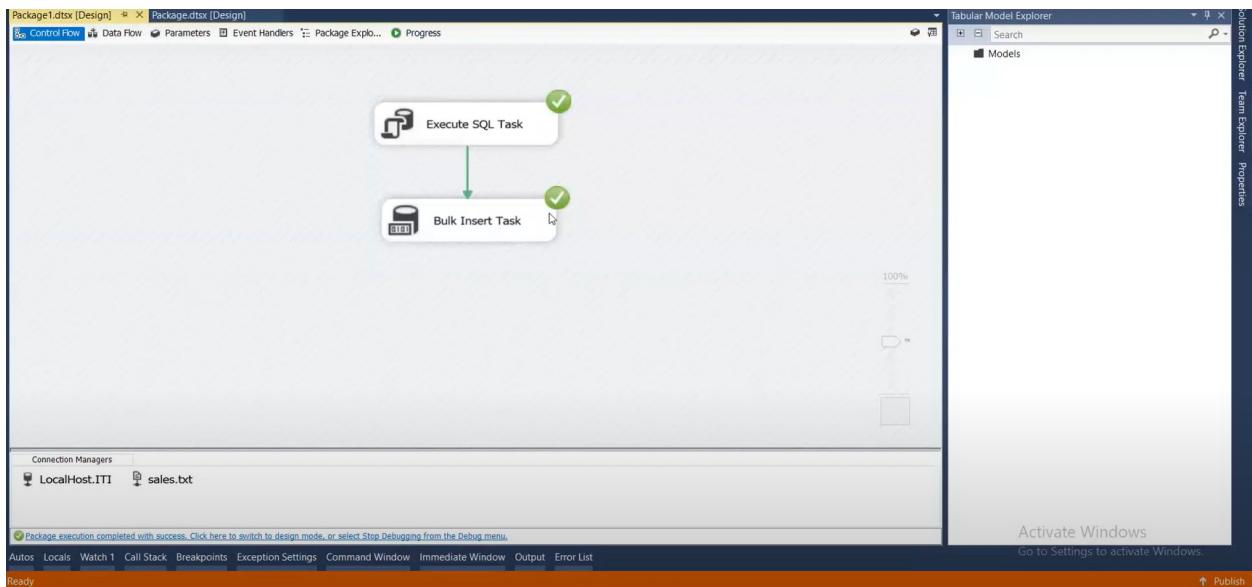
```
print("Truncate Table sales")
```

```
Truncate Table sales
```

```
print("Run")
```

```
Run
```





```

print("First:>{truncate table sales}")
print("Insert sales.txt into [dbo].[sales]")

First:>{truncate table sales}
Insert sales.txt into [dbo].[sales]

print("For Loop Container - SQL Server Integration Services (SSIS)")

For Loop Container - SQL Server Integration Services (SSIS)

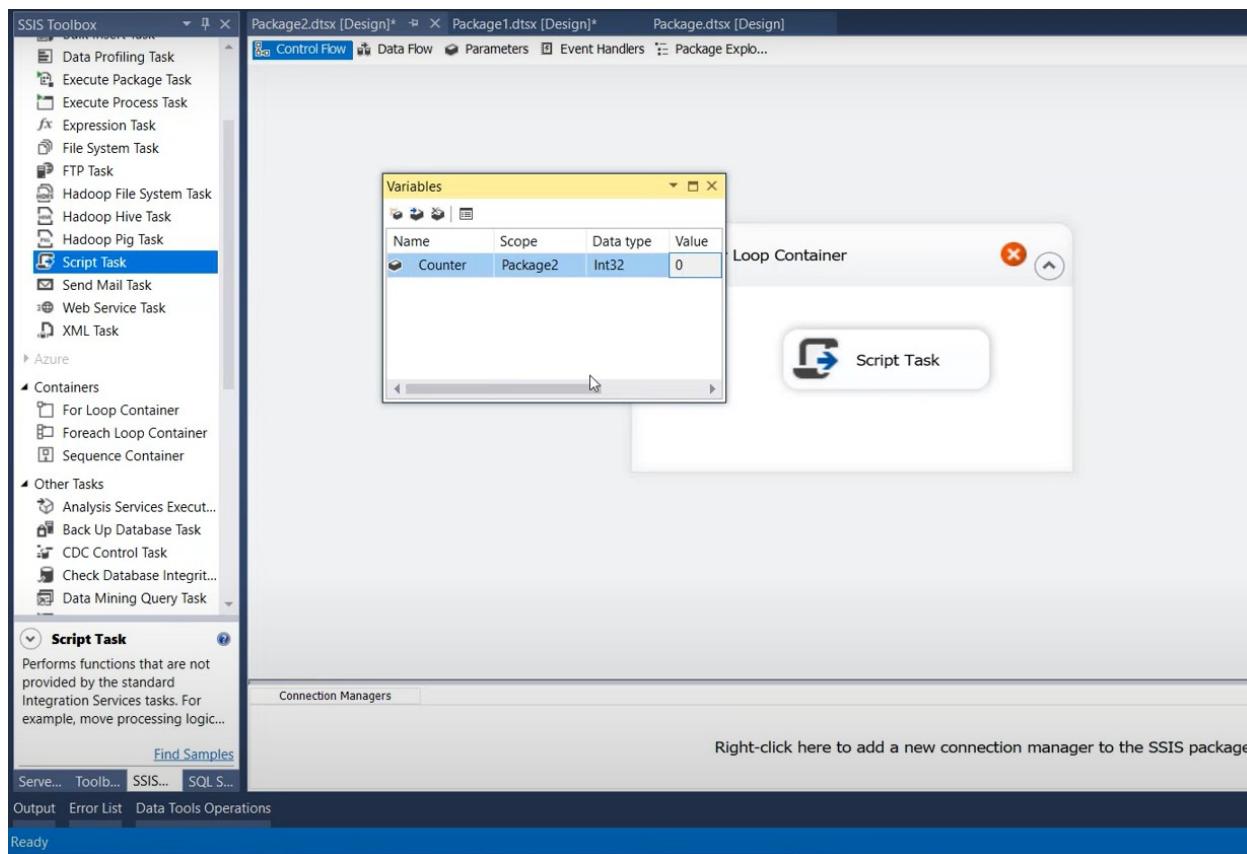
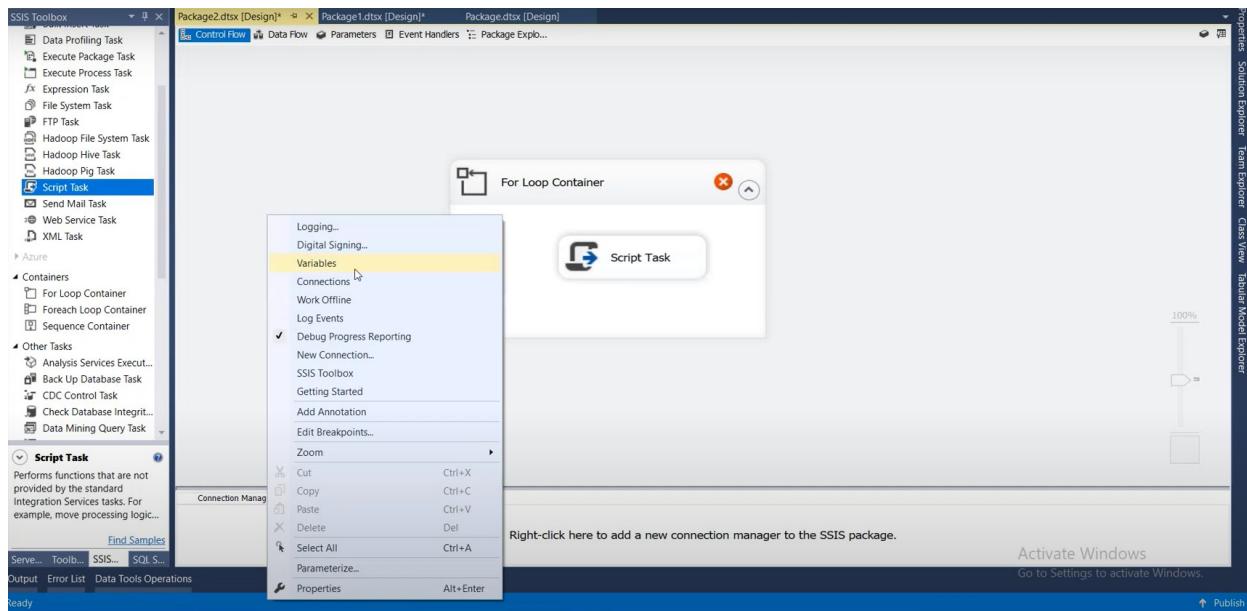
print("Script Task - SQL Server Integration Services (SSIS)")

Script Task - SQL Server Integration Services (SSIS)

```

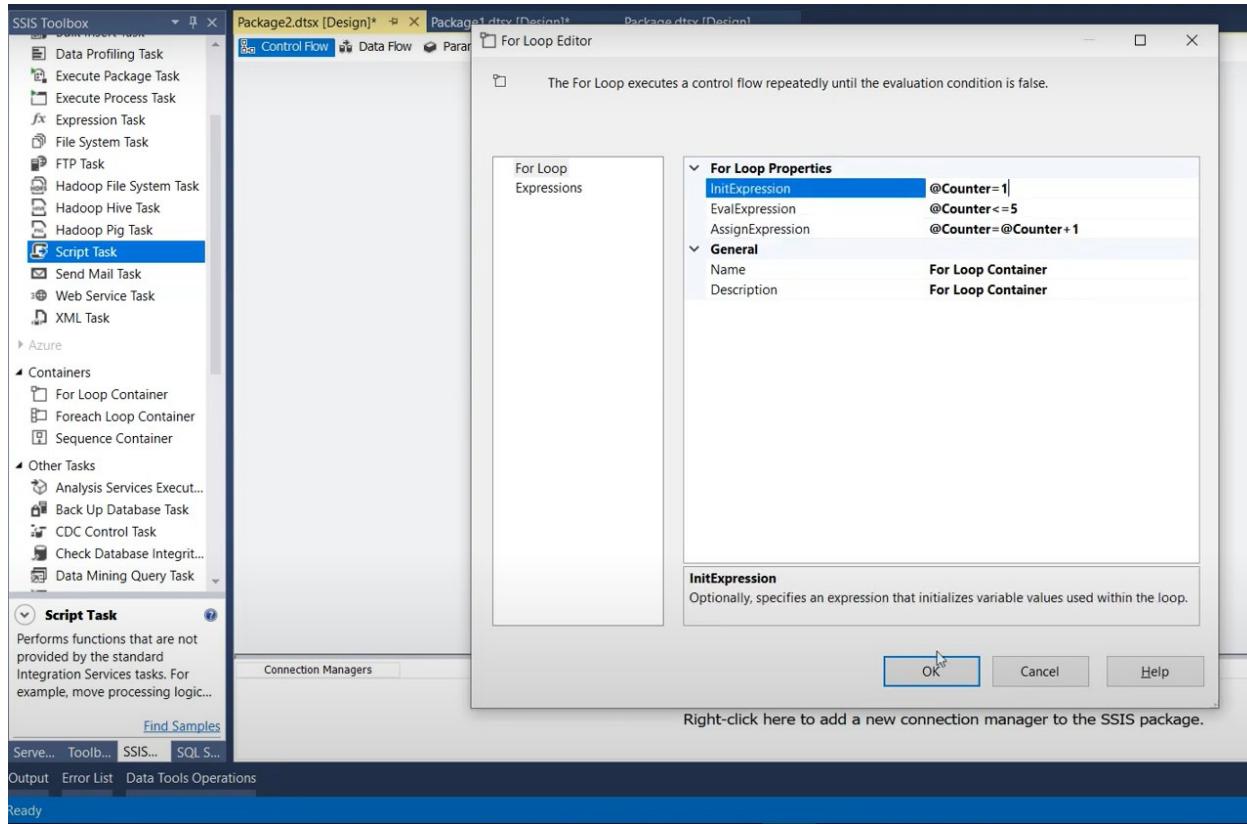
```
print("Right-Click Variables")
```

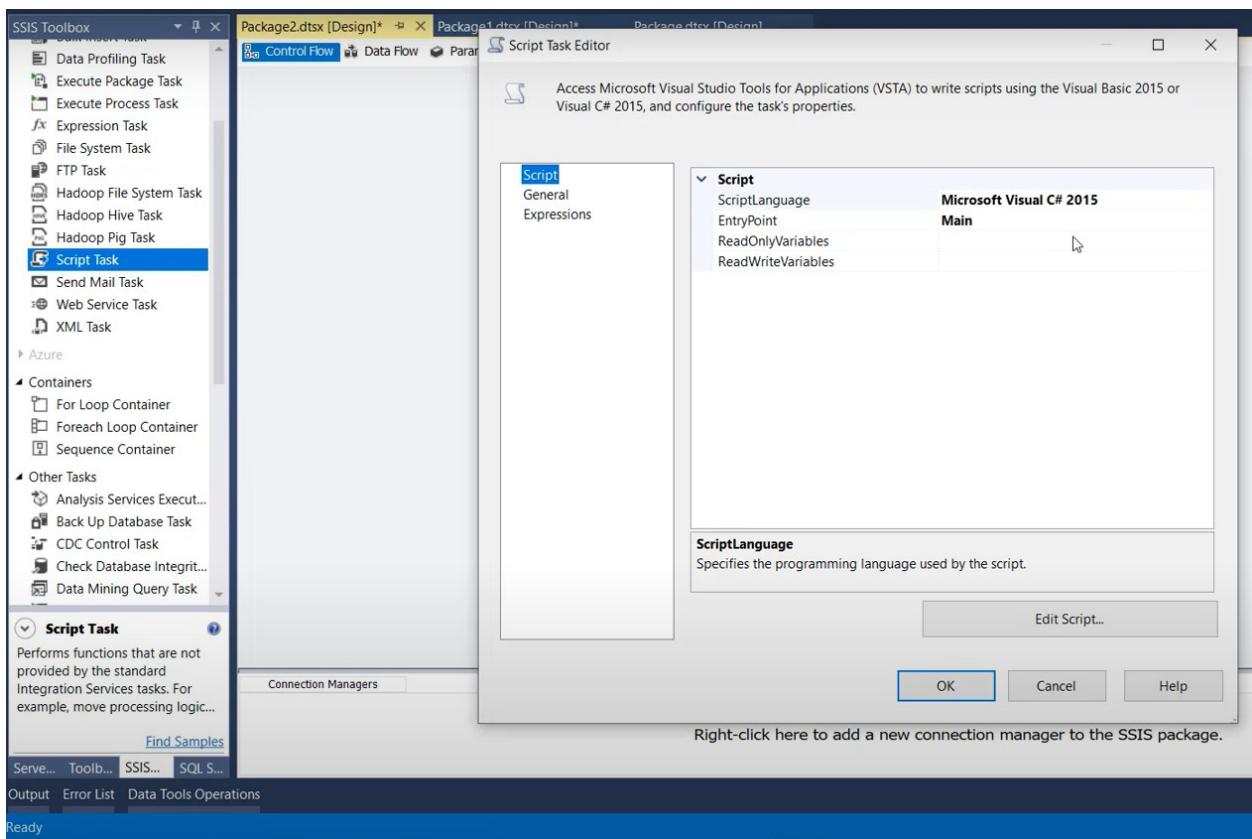
Right-Click Variables

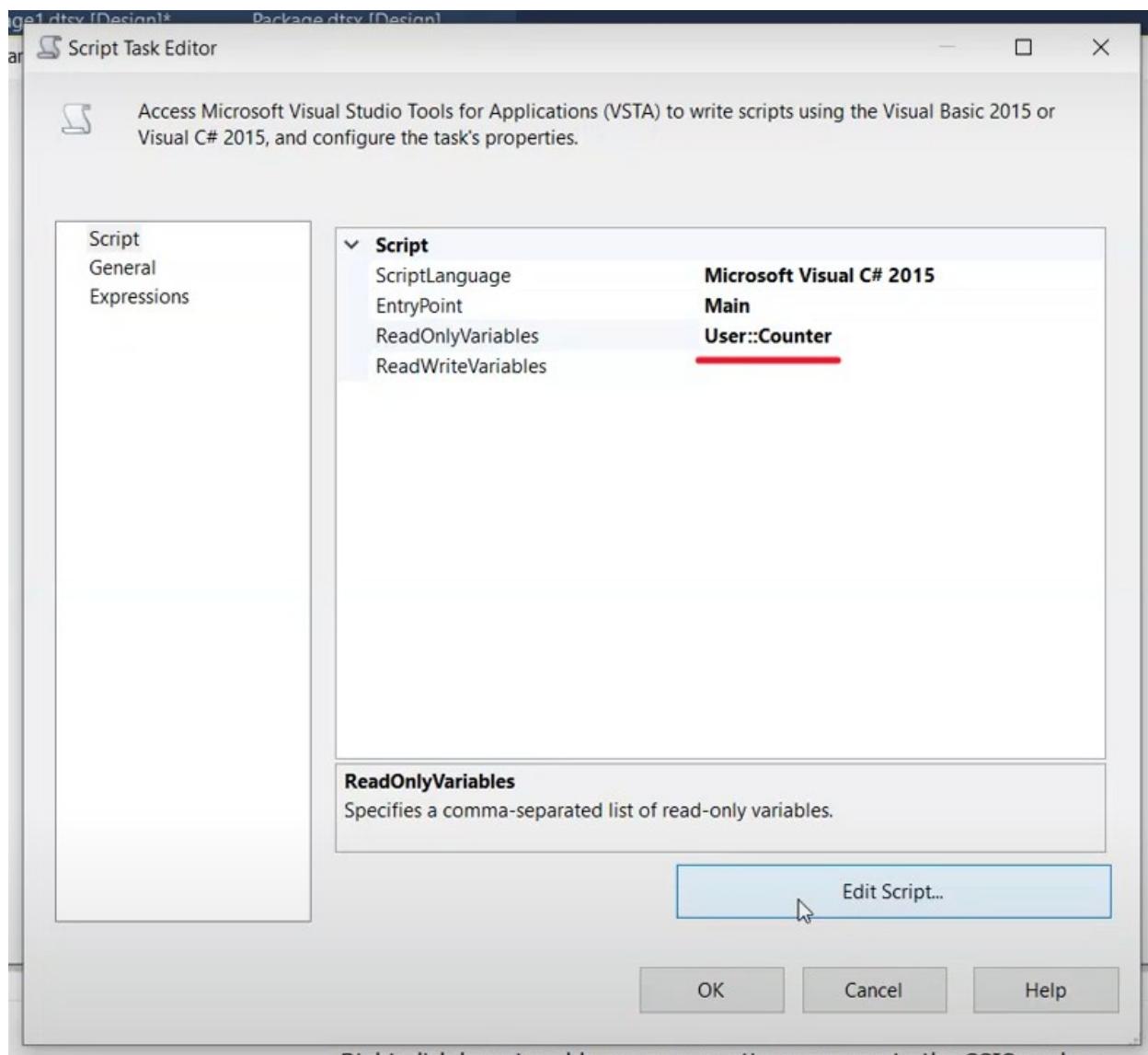


"Double click For Loop"

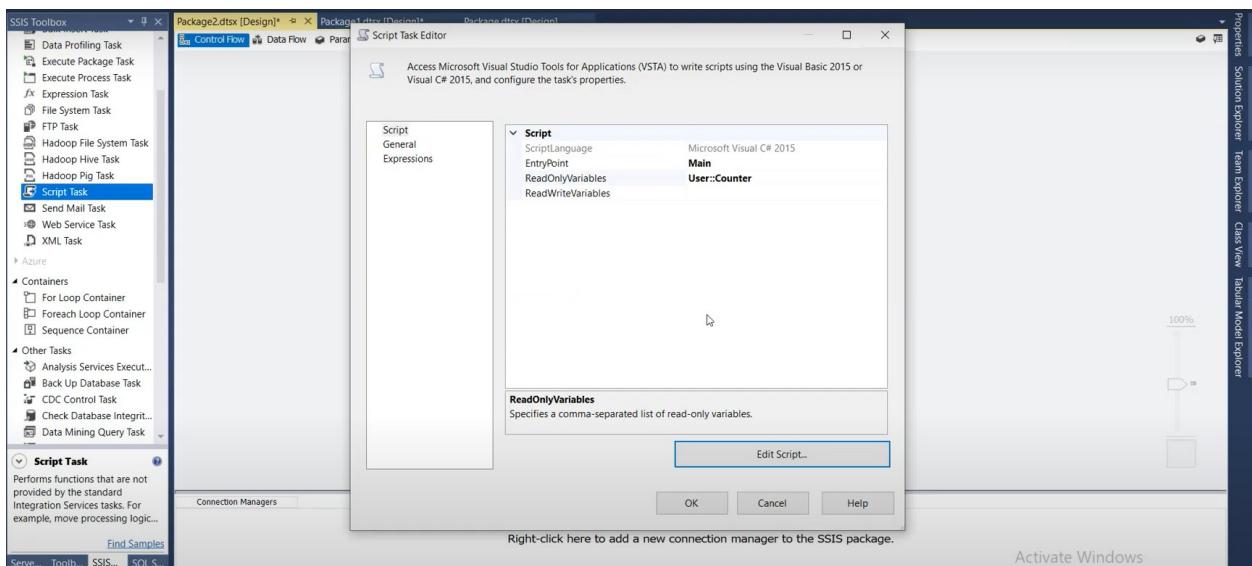
'Double click For Loop'



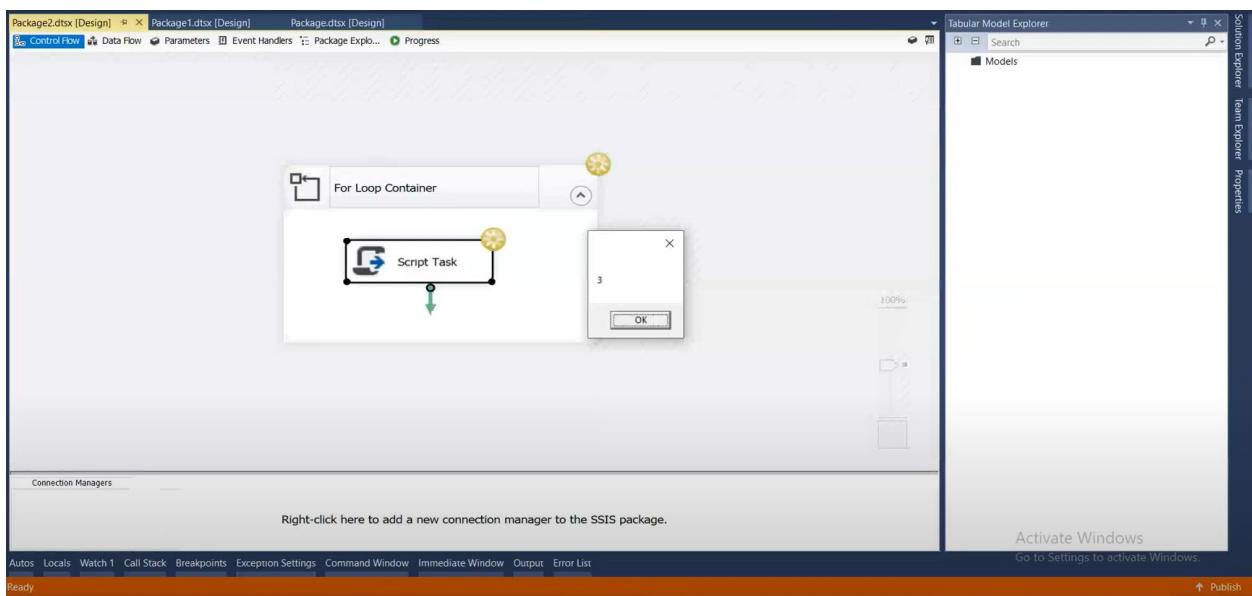


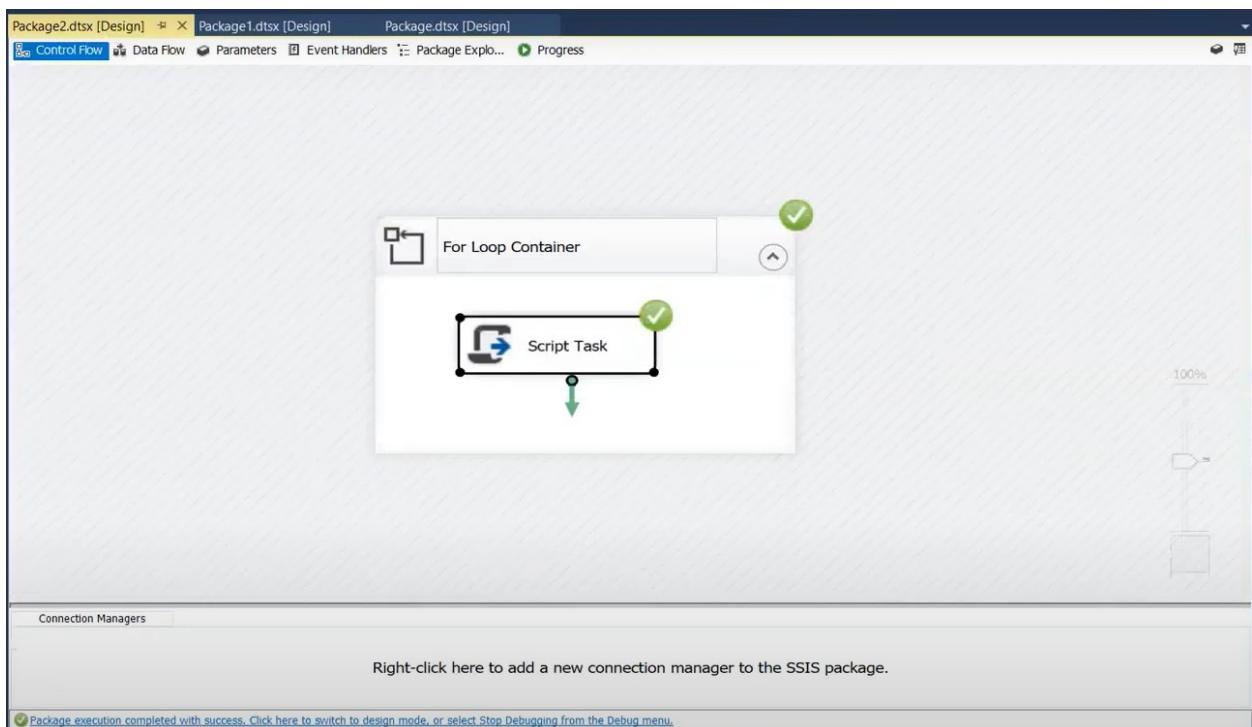


```
86  /// <summary>
87  /// This method is called when this script task executes in the control flow.
88  /// Before returning from this method, set the value of Dts.TaskResult to indicate success or failure.
89  /// To open Help, press F1.
90  /// </summary>
91  0 references
92  public void Main()
93  {
94      MessageBox.Show( Dts.Variables["Counter"].Value.ToString());
95  }
96  [ScriptResults declaration]
97
98  }
```



```
print("Any task in it run 5 Times")
Any task in it run 5 Times
```





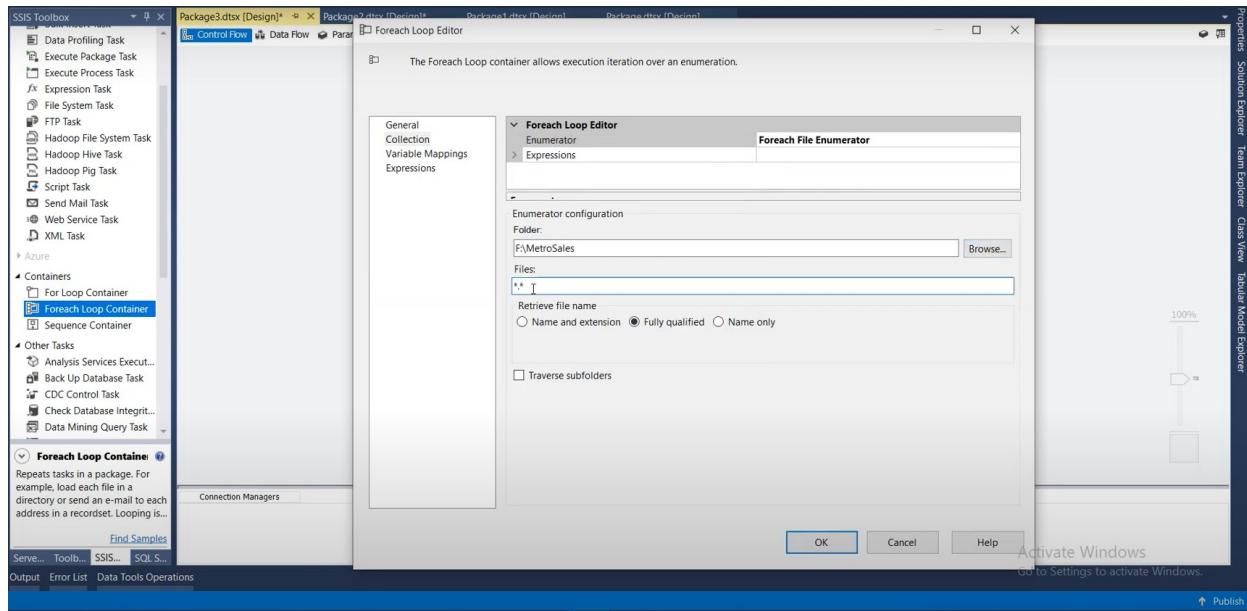
```
print("For Loop Container:-Any task in it run 5 Times")
For Loop Container:-Any task in it run 5 Times
print("Loop in all files and insert into Sales Table")
Loop in all files and insert into Sales Table
```

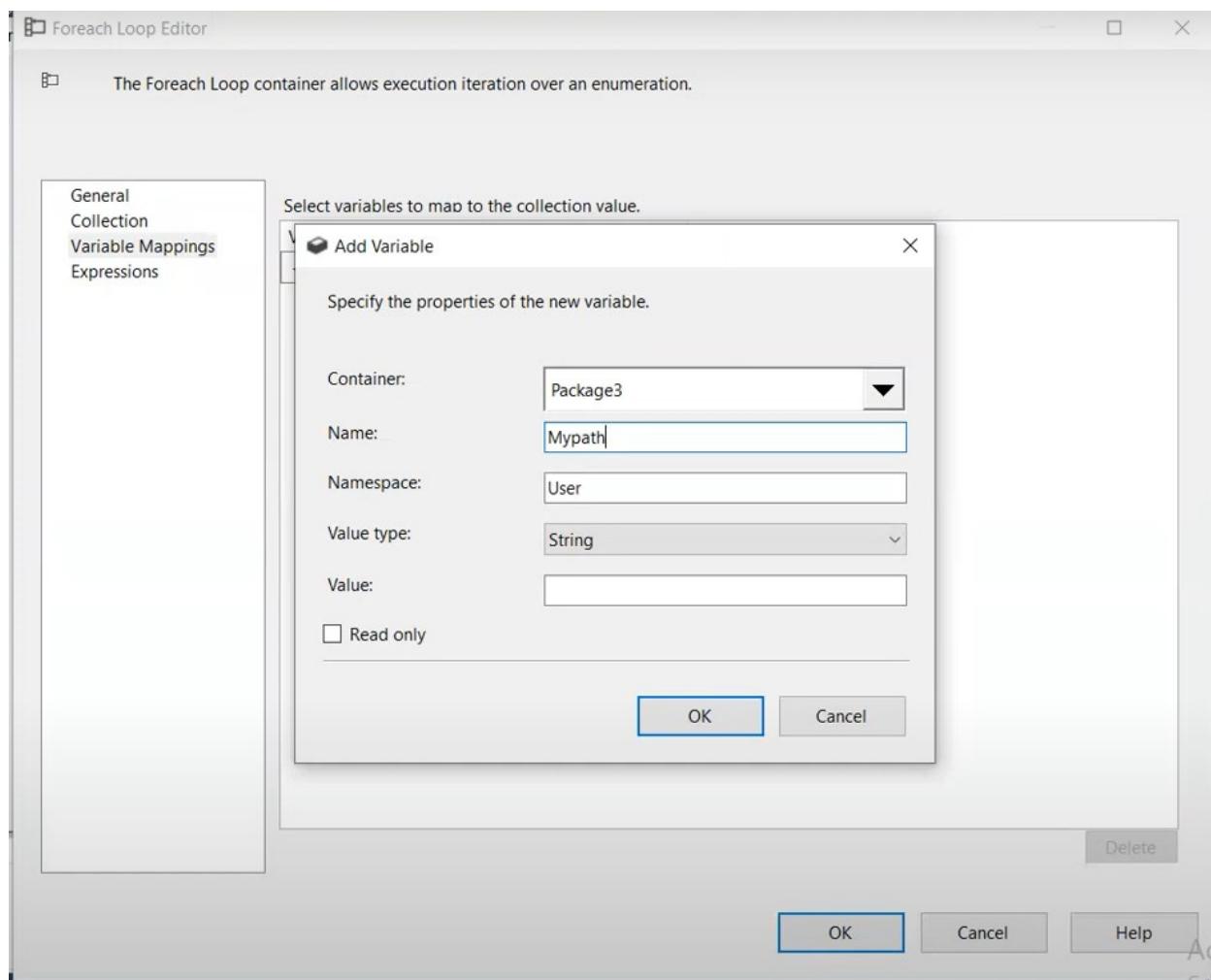
Name	Date modified	Type	Size
Alex	26/10/2020 12:48	File folder	
Cairo	26/10/2020 12:47	File folder	
Mansoura	26/10/2020 12:48	File folder	
Sales.txt	26/10/2020 12:48	Text Document	1 KB

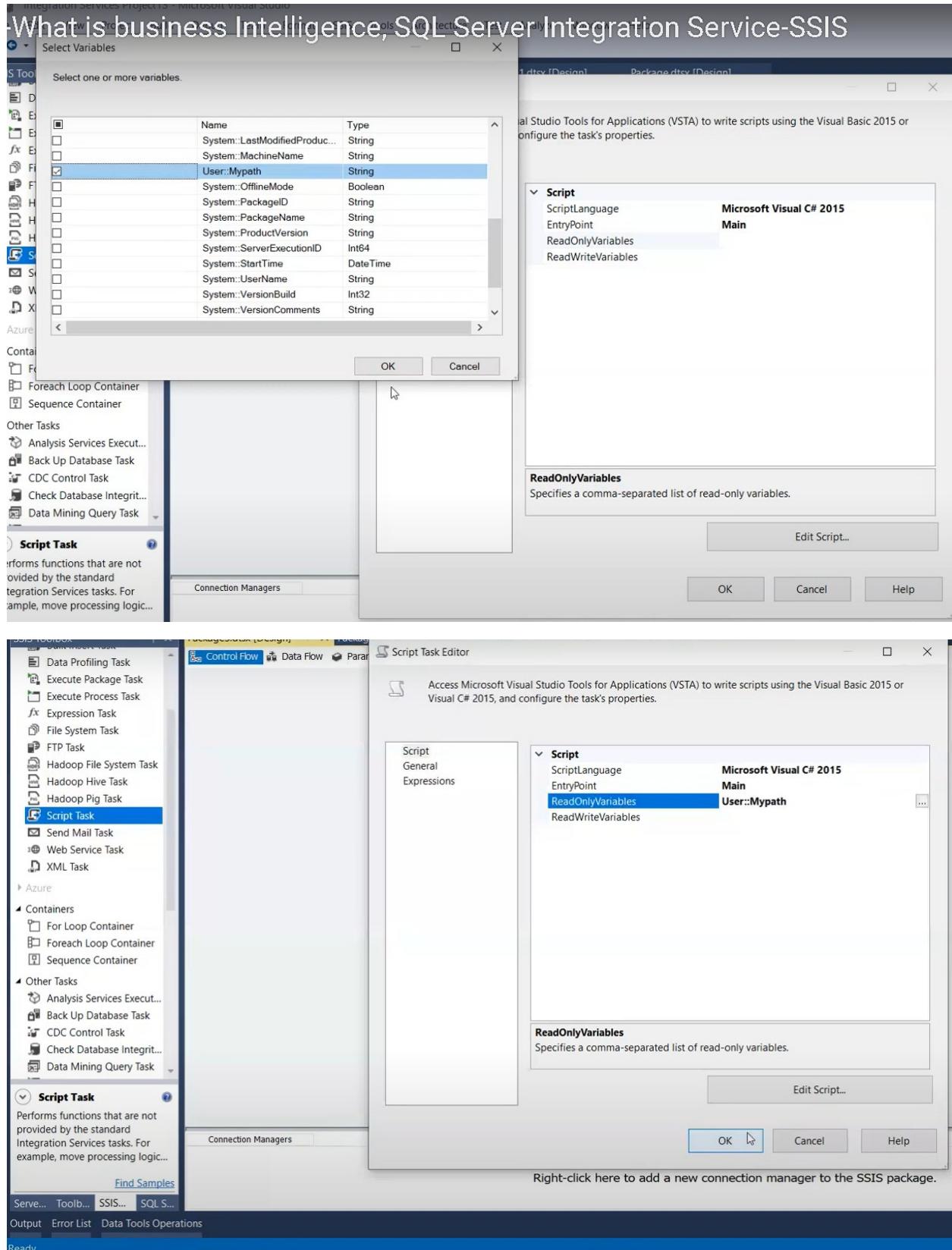
```
print("New Package")
New Package
print("Foreach Loop Container - SQL Server Integration Services ...")
Foreach Loop Container - SQL Server Integration Services ...
```

```
print("Foreach Loop Container For Loop Files&XML Tags")
```

Foreach Loop Container For Loop Files&XML Tags

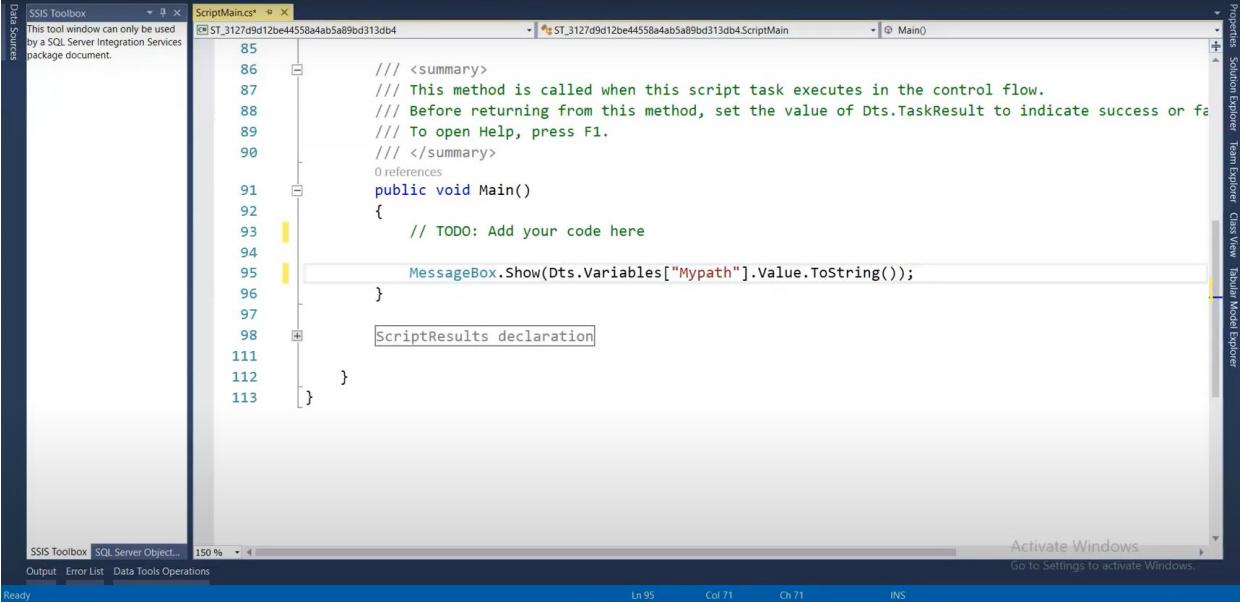






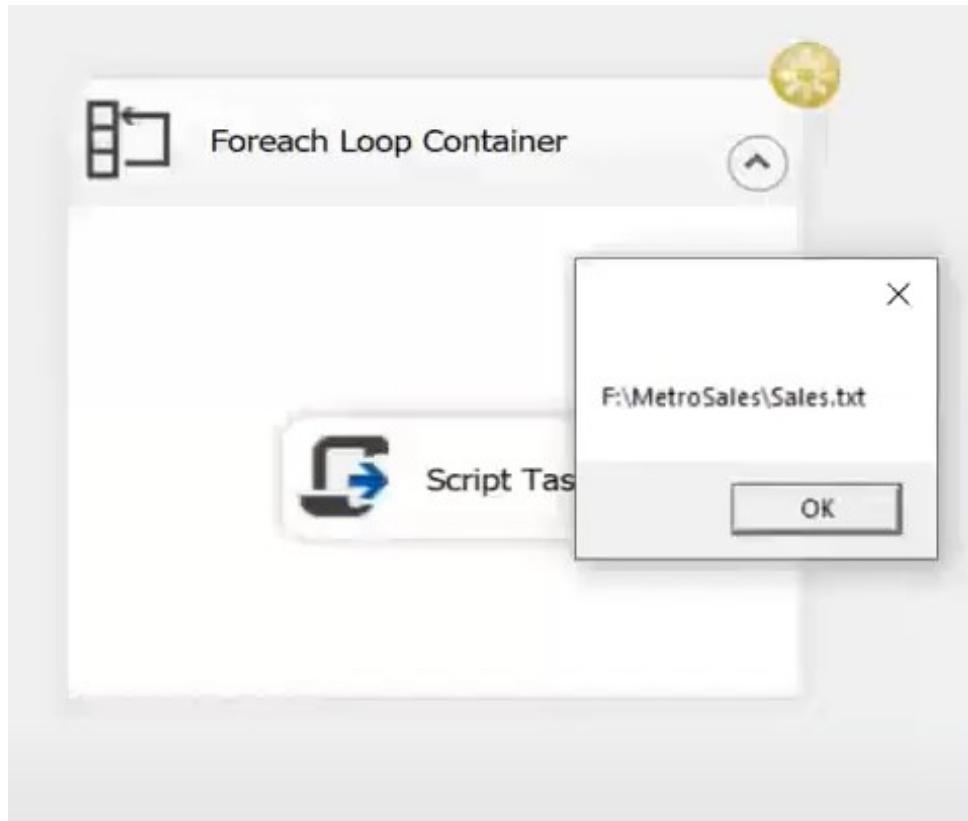
```
print("DTS>>Data Transformation Services")
```

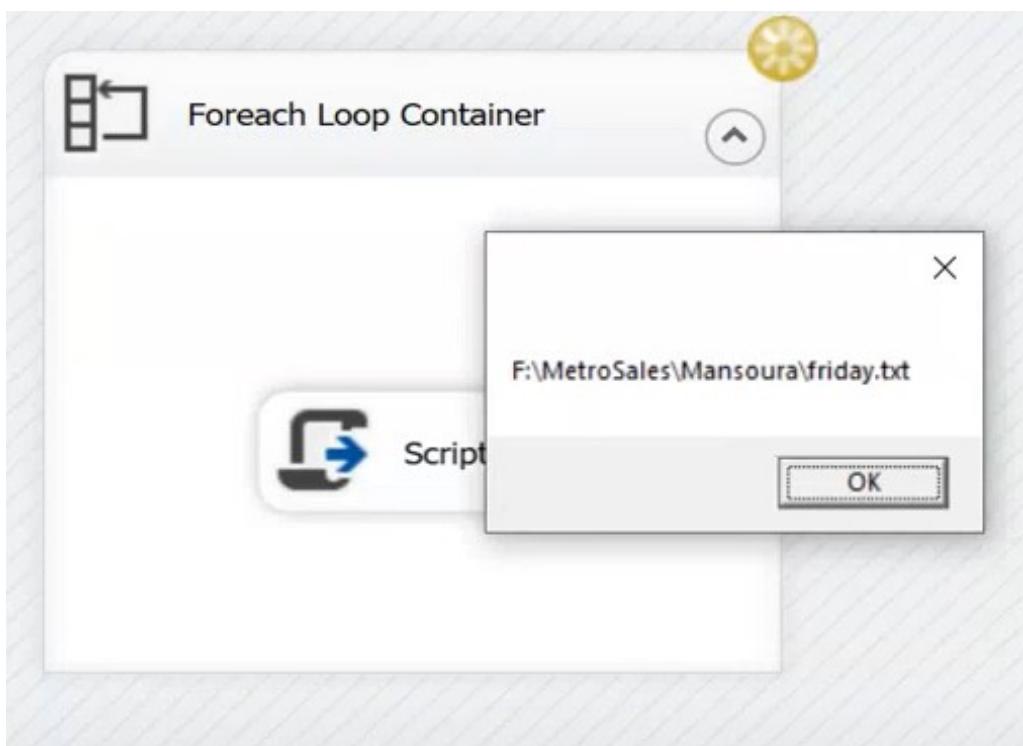
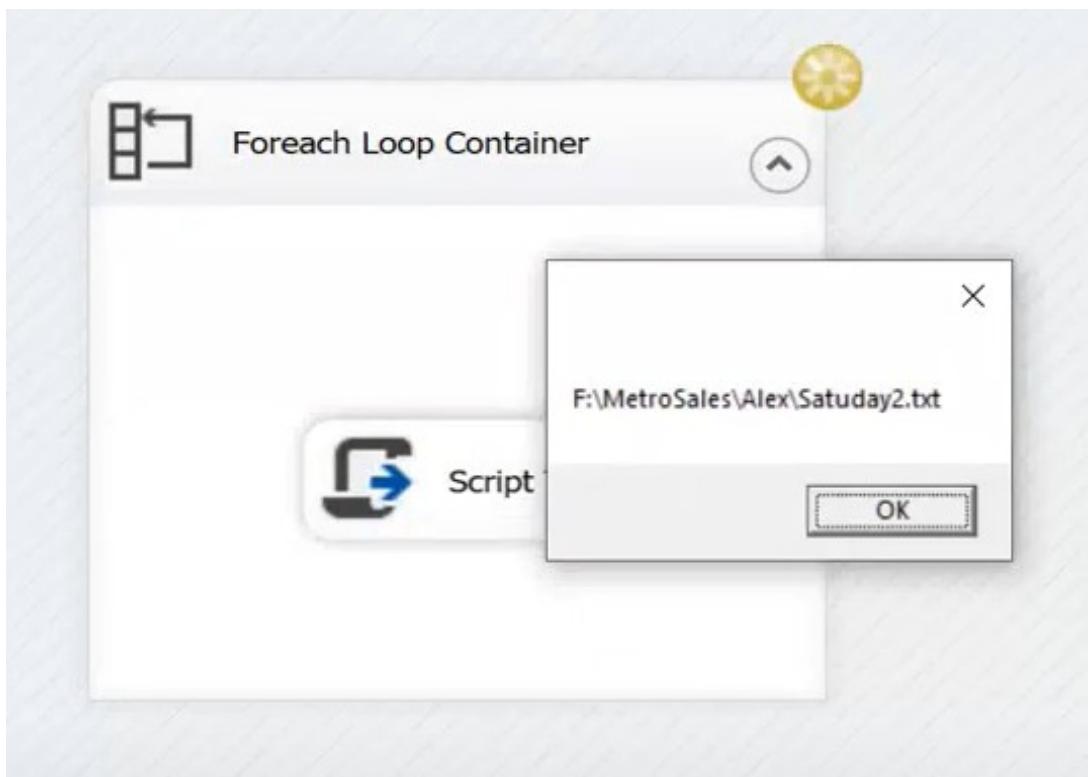
DTS>>Data Transformation Services

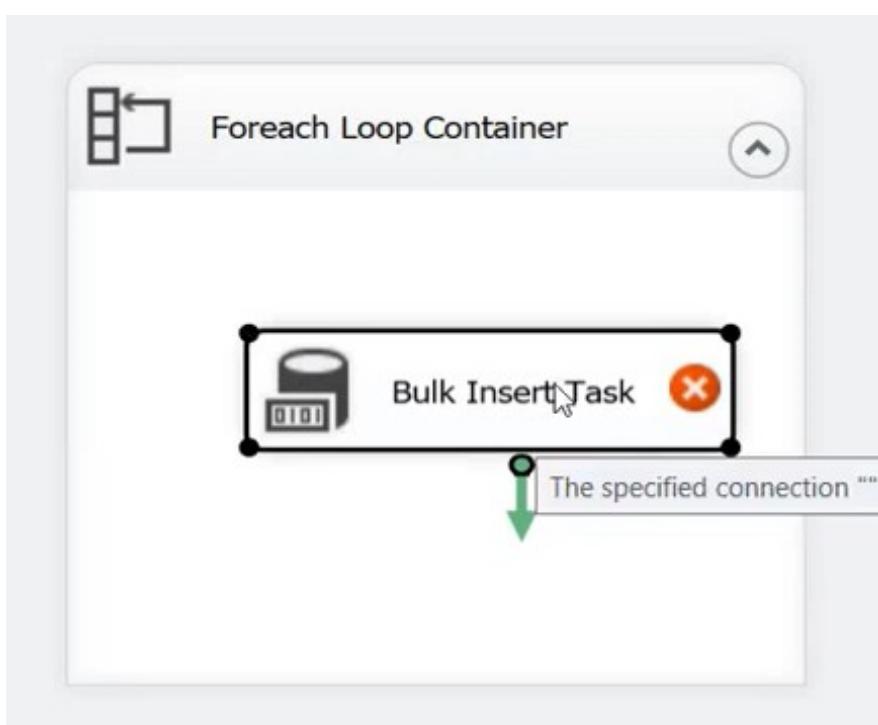
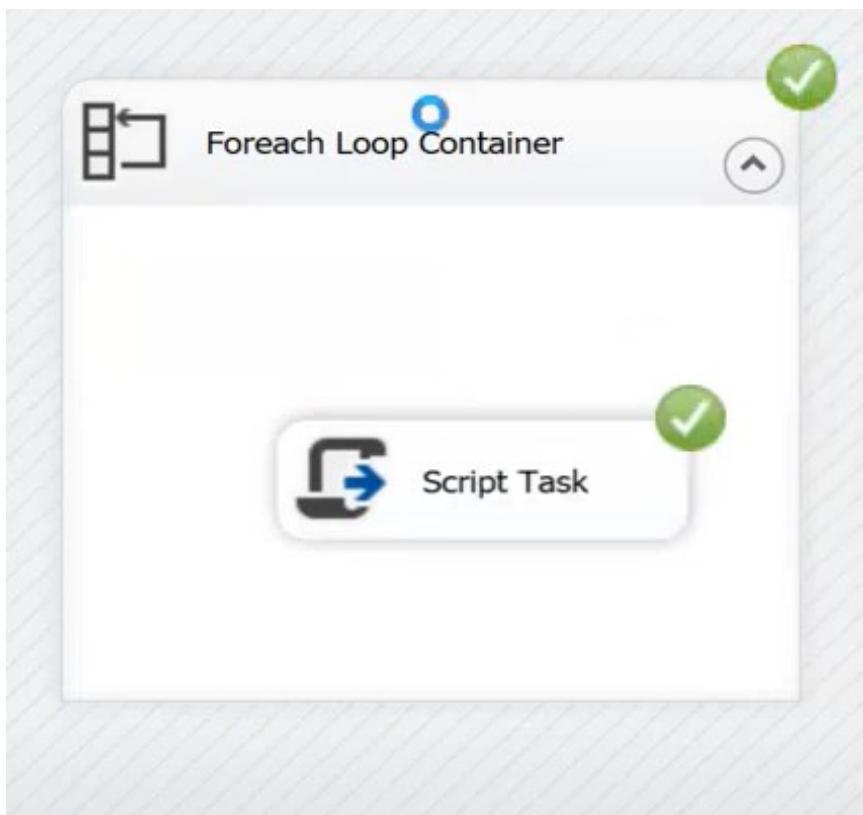


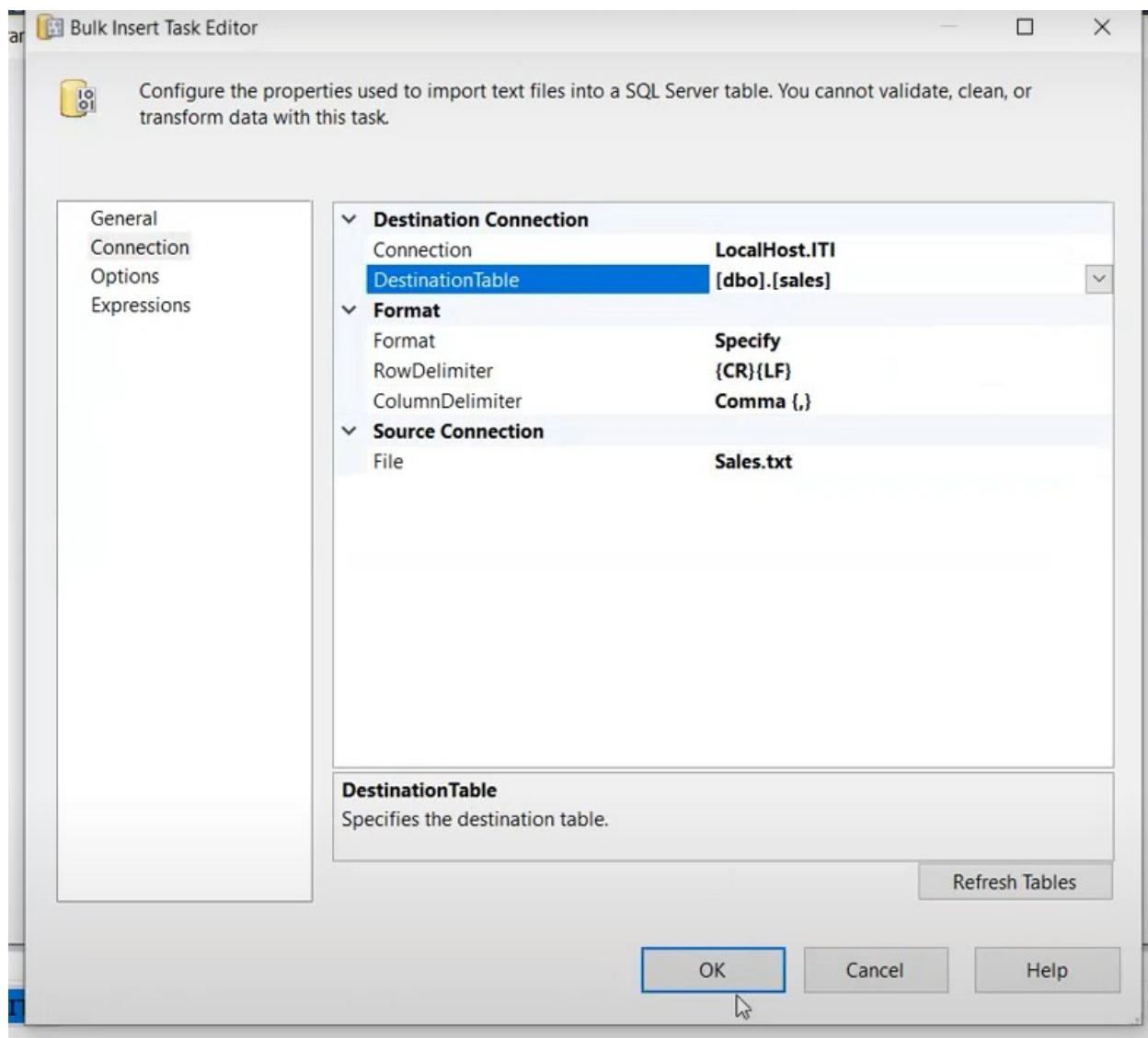
```
SSIS Toolbox  ScriptMain.cs * X
This tool window can only be used by a SQL Server Integration Services package document.

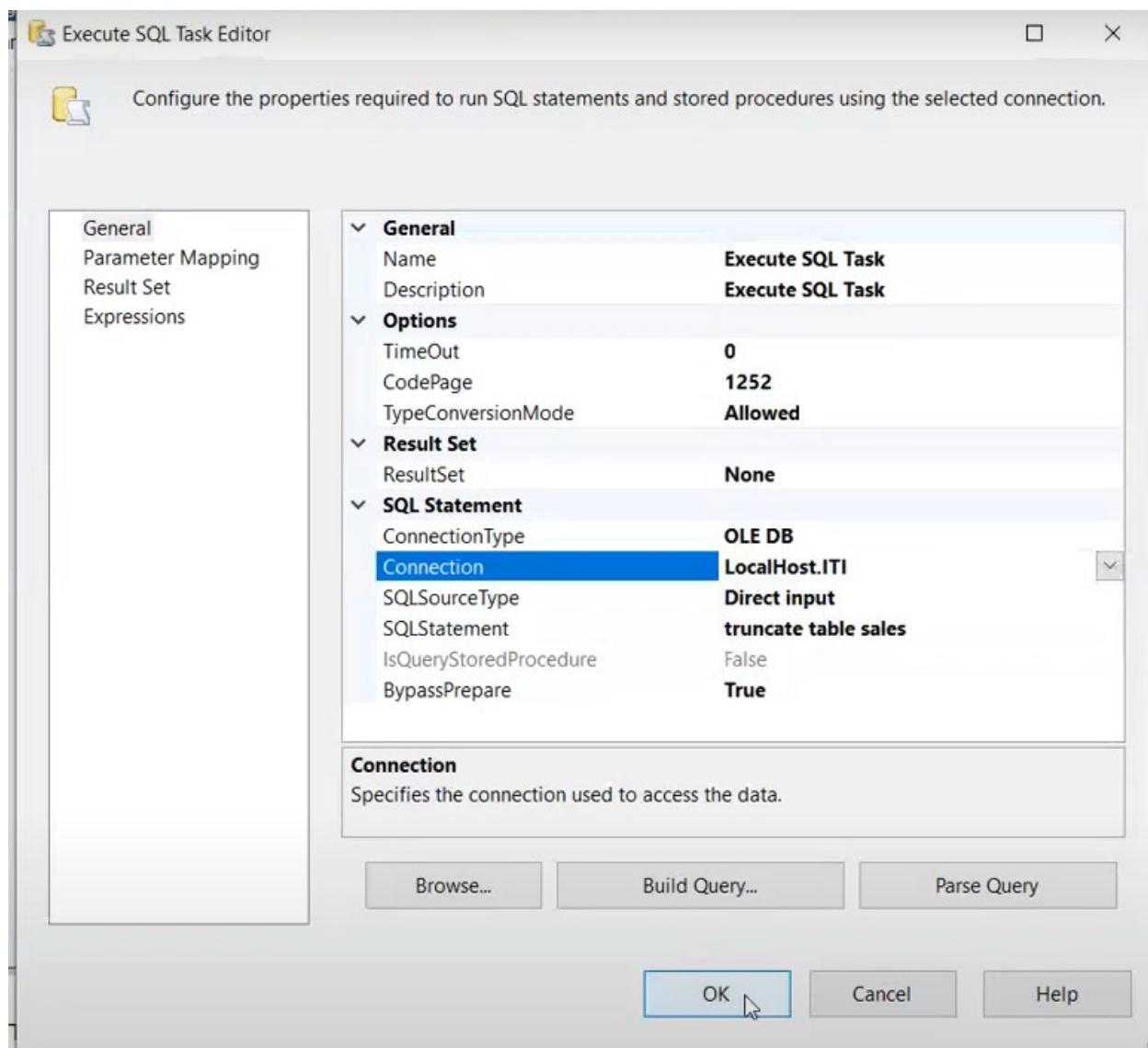
85      /// <summary>
86      /// This method is called when this script task executes in the control flow.
87      /// Before returning from this method, set the value of Dts.TaskResult to indicate success or failure.
88      /// To open Help, press F1.
89      /// </summary>
90      public void Main()
91      {
92          // TODO: Add your code here
93
94          MessageBox.Show(Dts.Variables["Mypath"].Value.ToString());
95
96      }
97
98      [ScriptResults declaration]
99
100
101
102
103 }
```

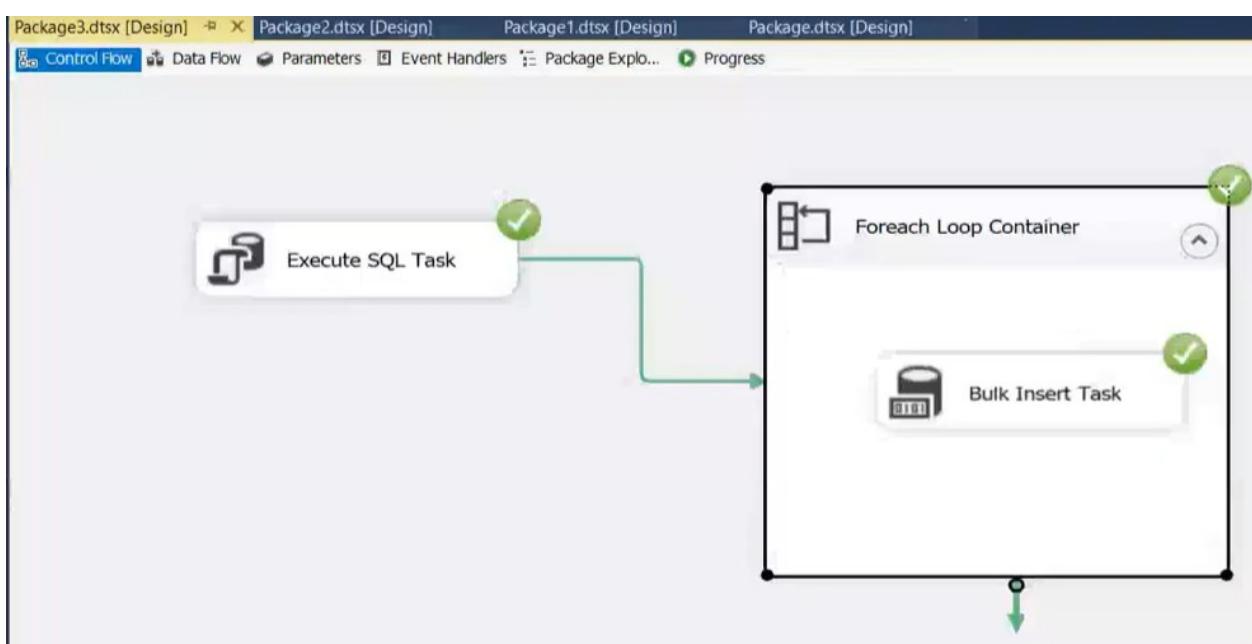
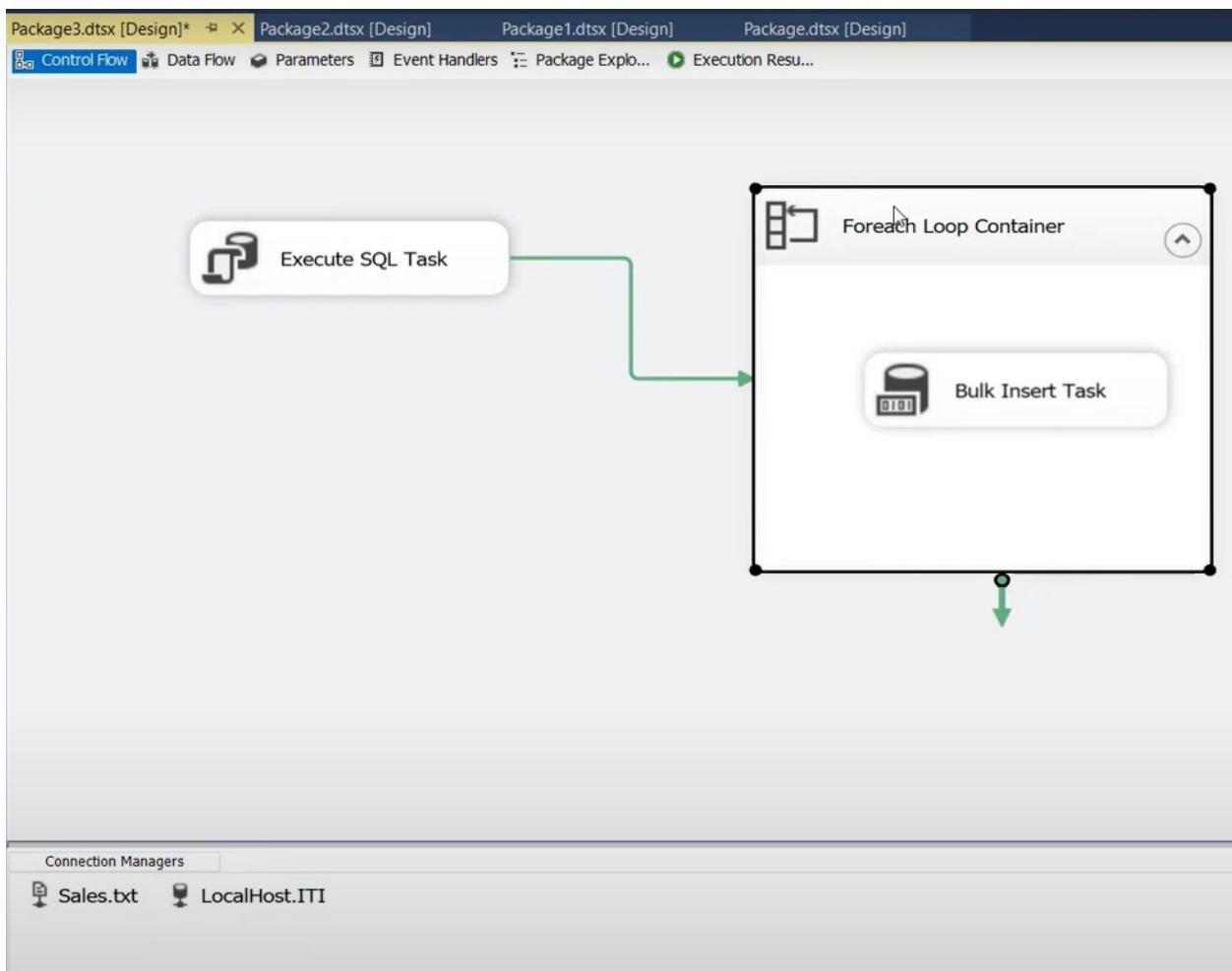


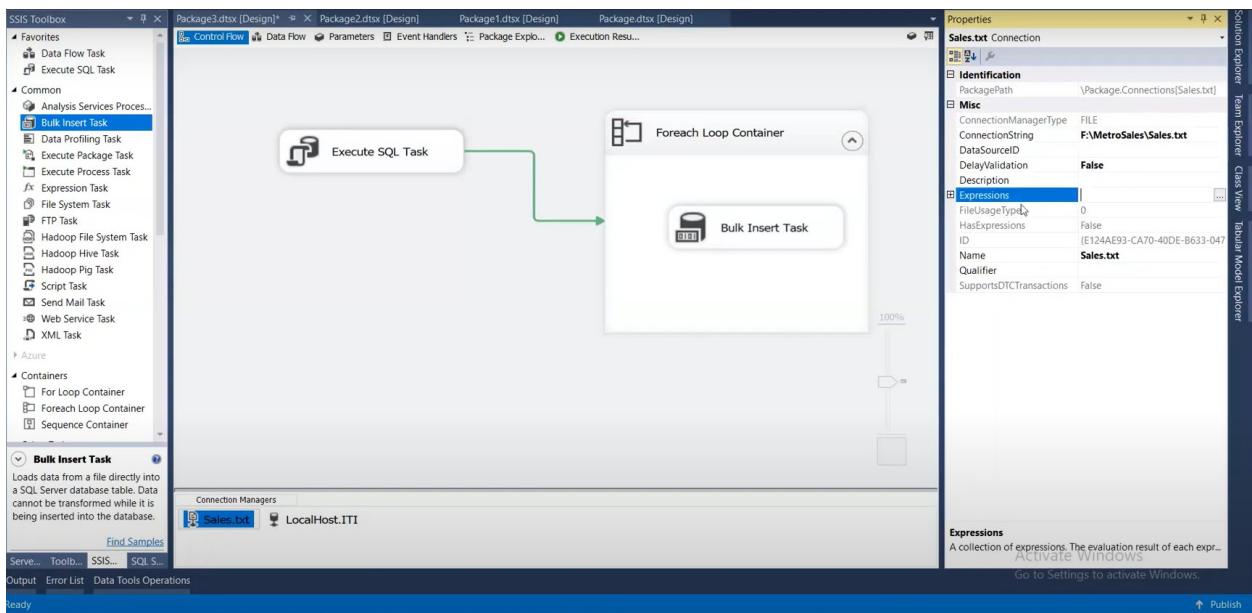


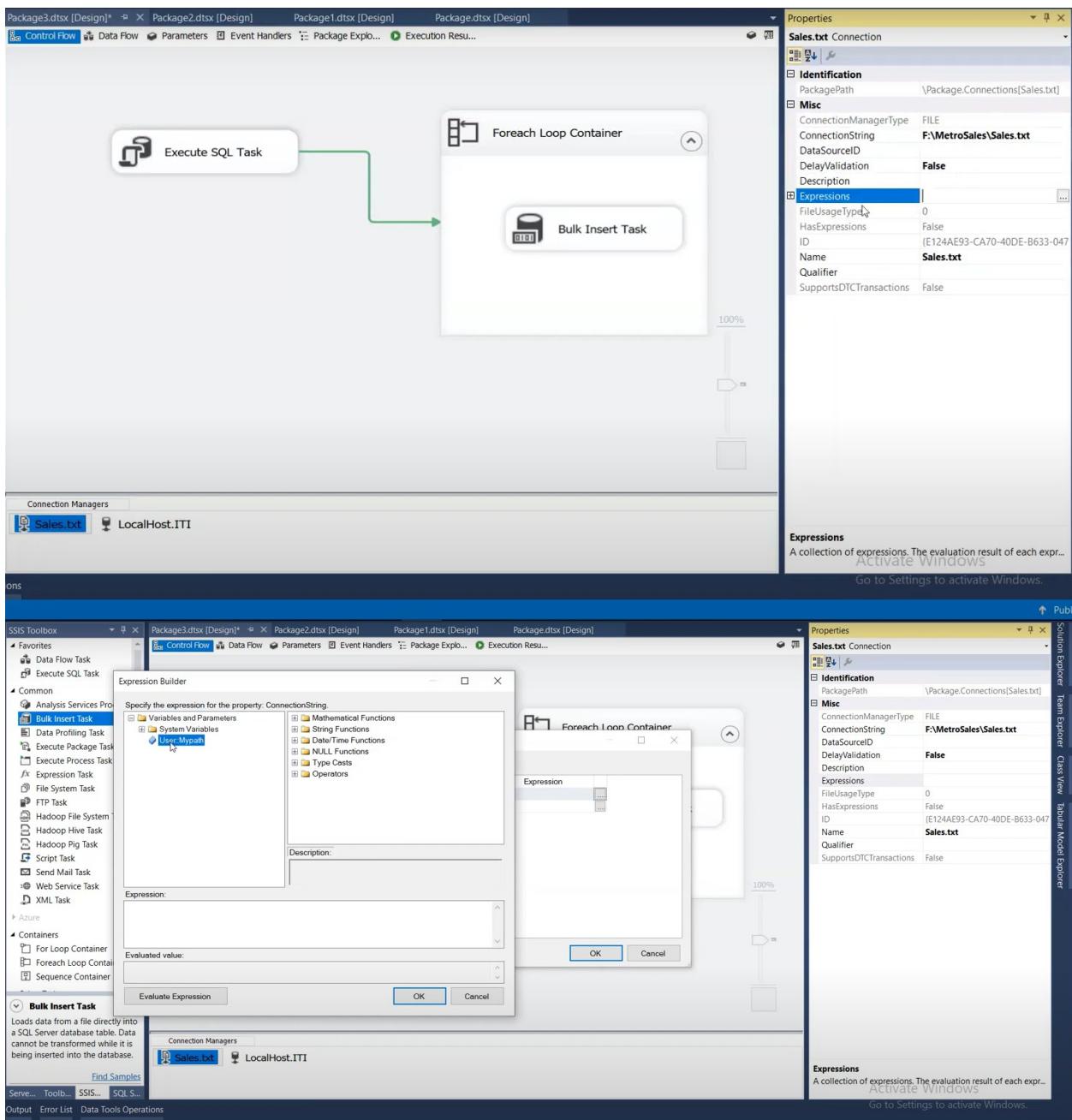


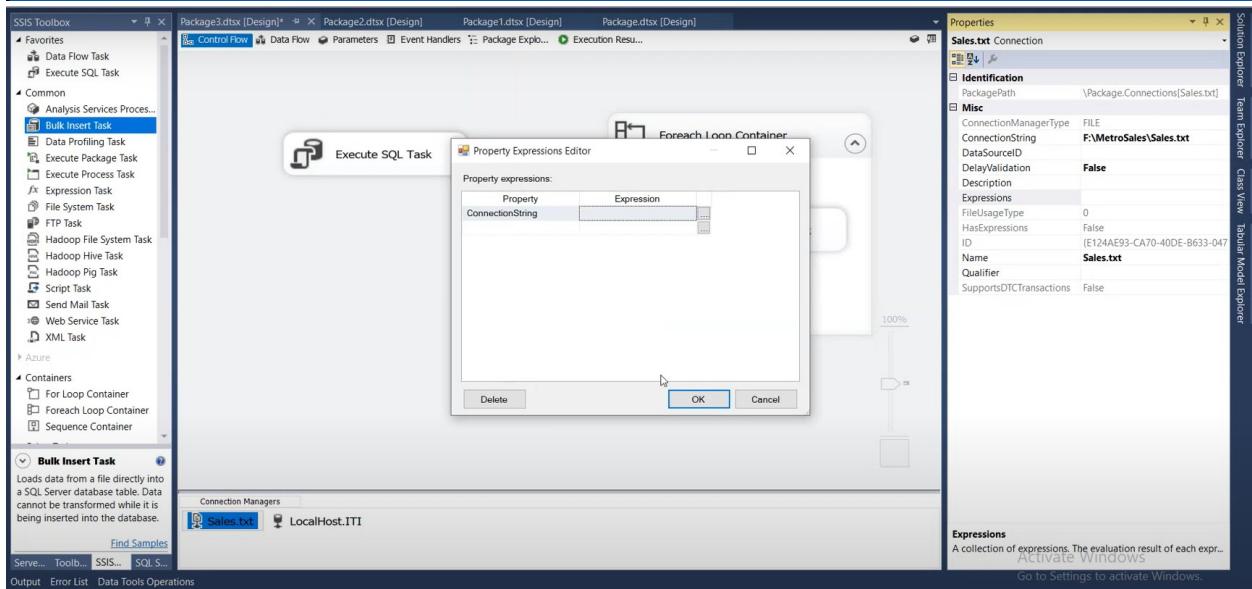
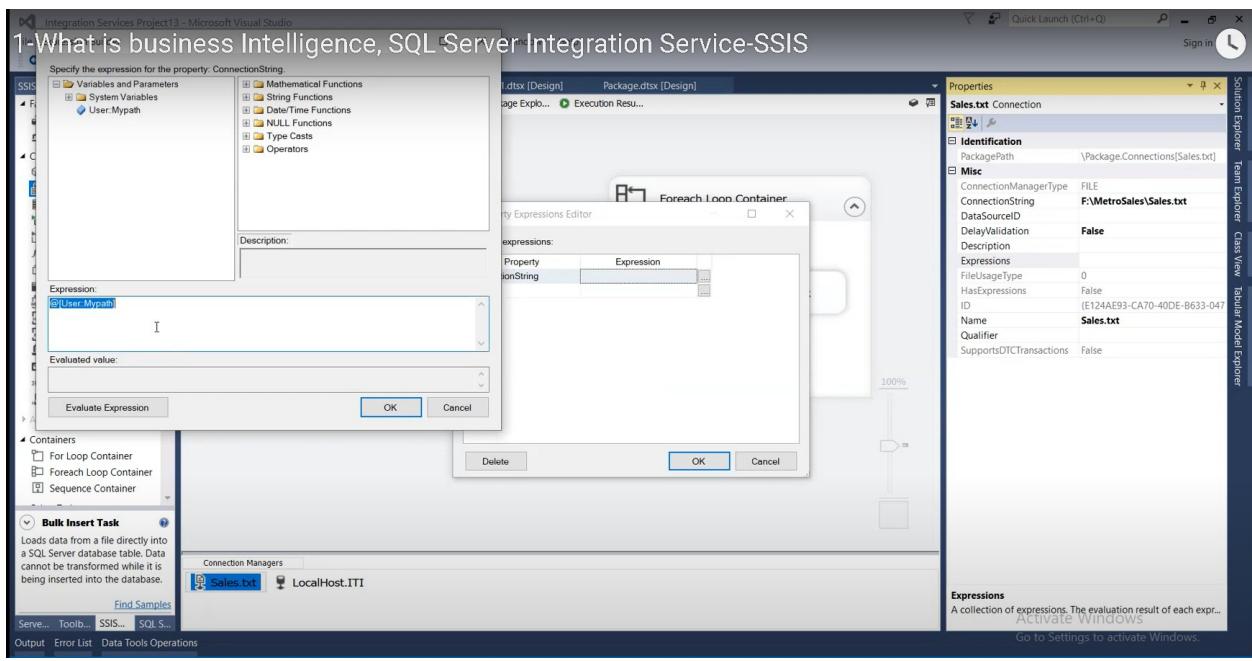












Object Explorer

Connect ▾

. (SQL Server 13.0.1742.0 - DESKTOP-VF50P25\Raia)

- Databases
 - System Databases
 - Database Snapshots
 - AdventureWorks2012
 - AdventureWorksDW2012
 - Company_SD
 - ITI
 - Database Diagrams
 - Tables
 - System Tables
 - FileTables
 - External Tables
 - dbo.Course
 - dbo.Department
 - dbo.Ins_Course
 - dbo.Instructor
 - dbo.sales
 - dbo.Stud_Course
 - dbo.Student
 - dbo.Topic
 - Views
 - External Resources
 - Synonyms
 - Programmability
 - Service Broker
 - Storage
 - Security
 - Mansoura_DB
 - ReportServer
 - ReportServerTempDB
 - SD
 - Security
 - Server Objects

DESKTOP-VF50P25\ITI - dbo.sales

DESKTOP-VF50P25\ITI - eWorks DW for DAX*

DESKTOP-VF50P25\ITI - W2012 - Geography*

ProductID	SalesmanName	Quantity
1	ahmed	10
1	khalid	20
1	ali	45
2	ahmed	15
1	ahmed	10
1	khalid	20
1	ali	45
1	ahmed	10
1	khalid	20
1	ali	45
2	ahmed	15
2	khalid	30
2	ali	20
3	ahmed	30
4	ali	80
1	ahmed	10
1	khalid	20
1	ali	45
2	ahmed	15
2	khalid	30
2	ali	20
1	ahmed	10
1	khalid	20
1	ali	45
2	ahmed	15
2	khalid	30
2	ali	20
3	ahmed	30

Execute SQL Ctrl+R

Cut Ctrl+X

Copy Ctrl+C

Paste Ctrl+V

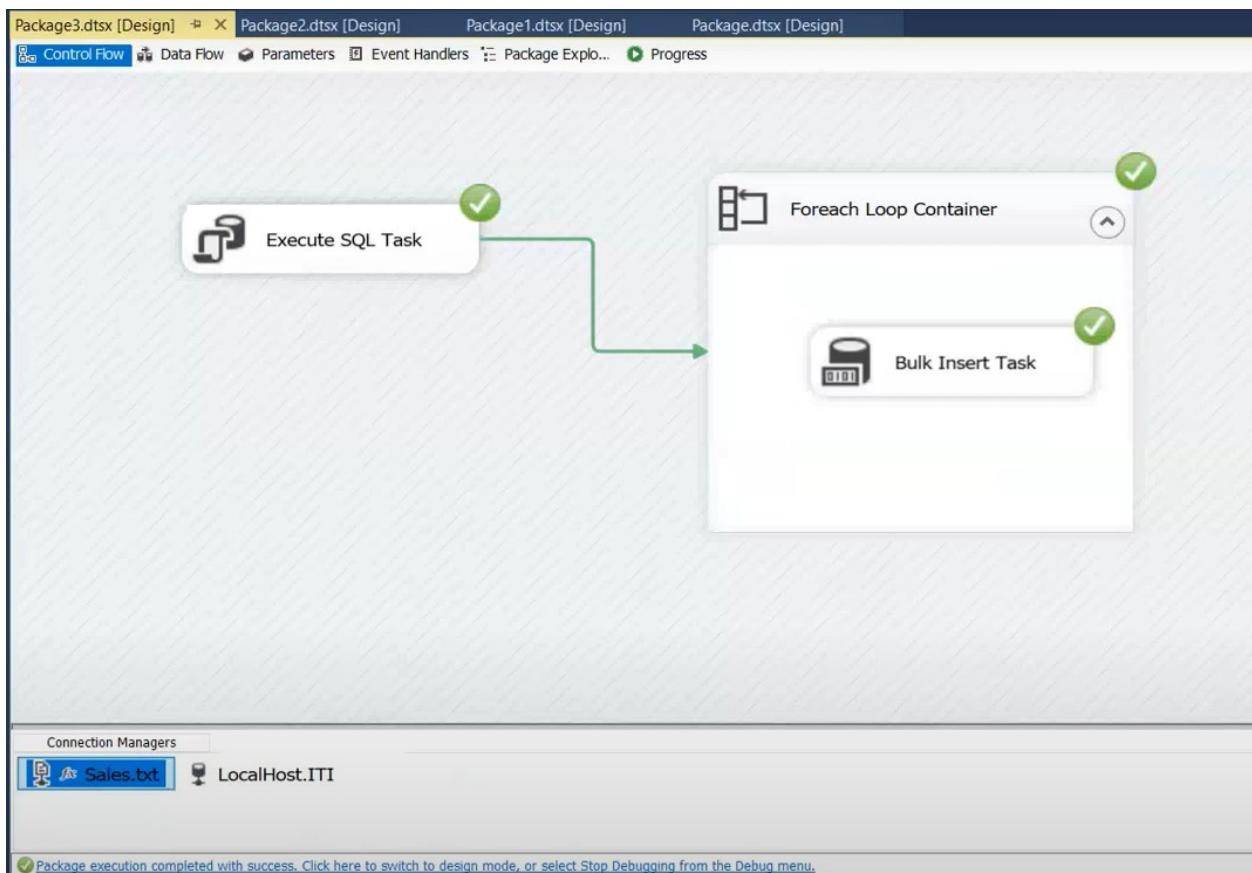
Delete Del

Pane

Clear Results

Properties Alt+Enter

Output



```

print("File Copy Paste Drag Into Table"*20)

File Copy Paste Drag Into TableFile Copy Paste Drag Into TableFile
Copy Paste Drag Into TableFile Copy Paste Drag Into TableFile Copy
Paste Drag Into TableFile Copy Paste Drag Into TableFile Copy Paste
Drag Into TableFile Copy Paste Drag Into TableFile Copy Paste Drag
Into TableFile Copy Paste Drag Into TableFile Copy Paste Drag Into
TableFile Copy Paste Drag Into TableFile Copy Paste Drag Into
TableFile Copy Paste Drag Into TableFile Copy Paste Drag Into
TableFile Copy Paste Drag Into TableFile Copy Paste Drag Into
TableFile Copy Paste Drag Into TableFile Copy Paste Drag Into
TableFile Copy Paste Drag Into Table

```

File Copy paste drag into Table End

```

print("$$$$*30)

$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$
$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$$

print("Data Flow Task - SQL Server Integration Services (SSIS)")

Data Flow Task - SQL Server Integration Services (SSIS)

```

```

print("Lets Make Data transformation")

Lets Make Data transformation

print("Data Flow Task - SQL Server Integration Services (SSIS)")

Data Flow Task - SQL Server Integration Services (SSIS)

print("Make New Package")

Make New Package

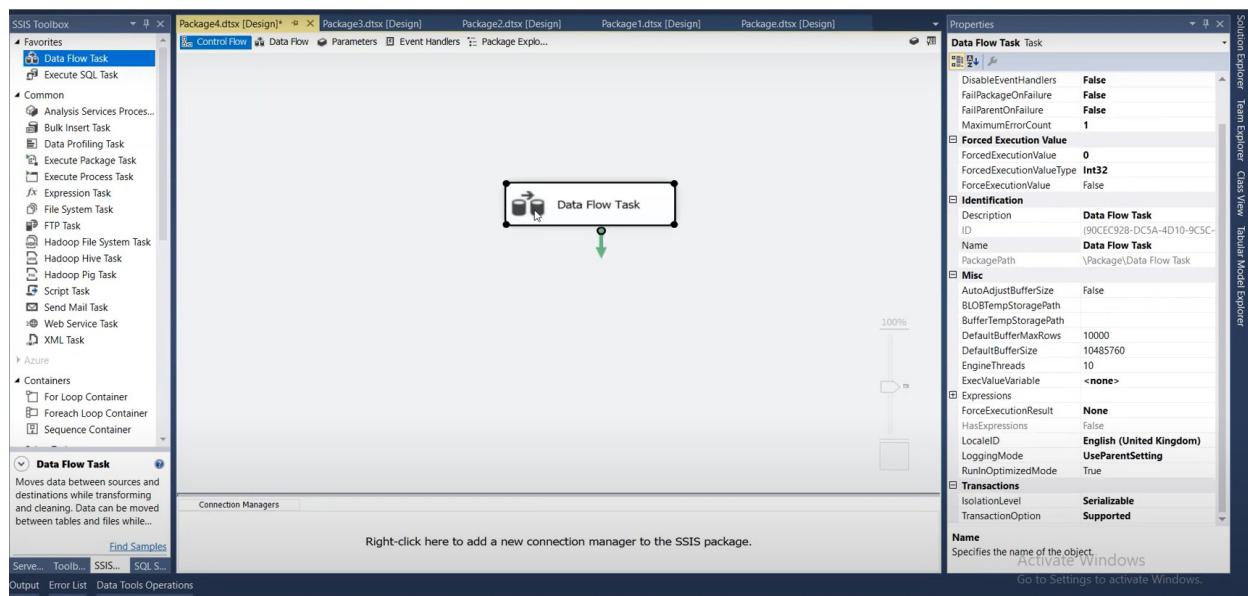
print("Data Flow Task")

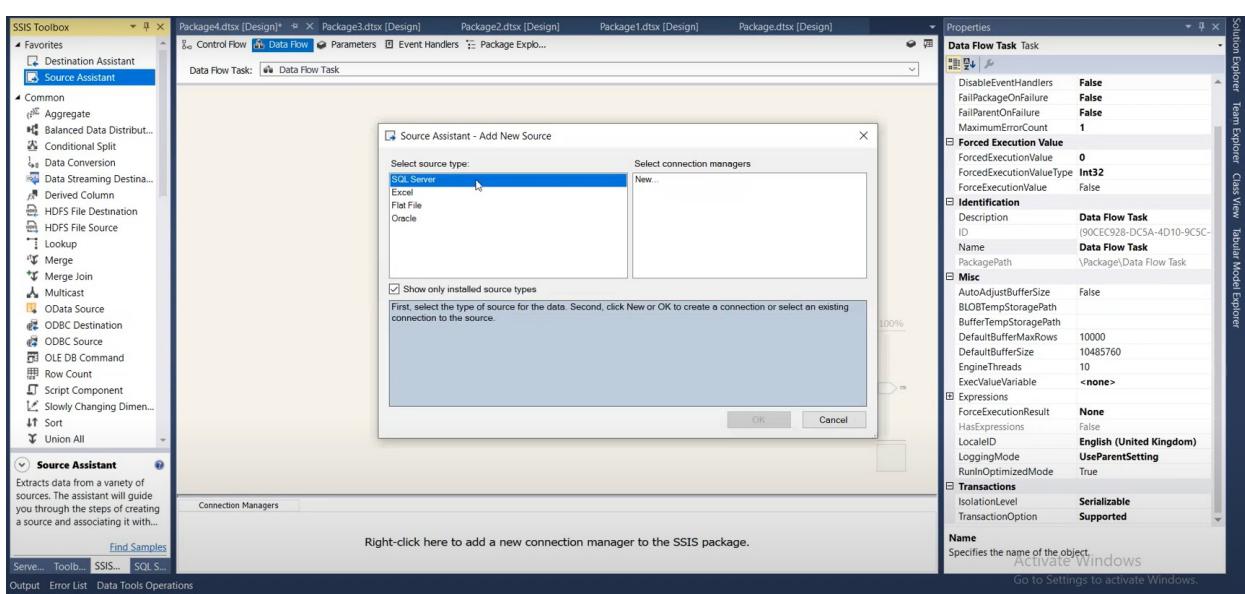
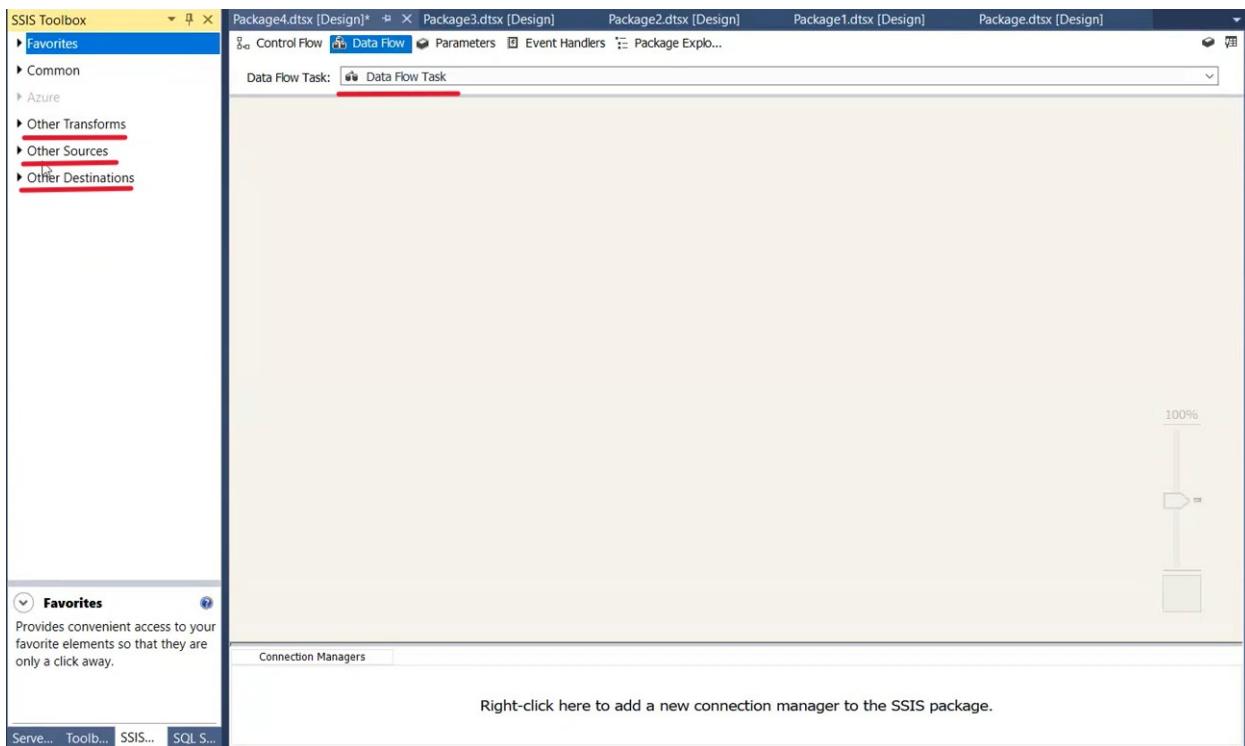
Data Flow Task

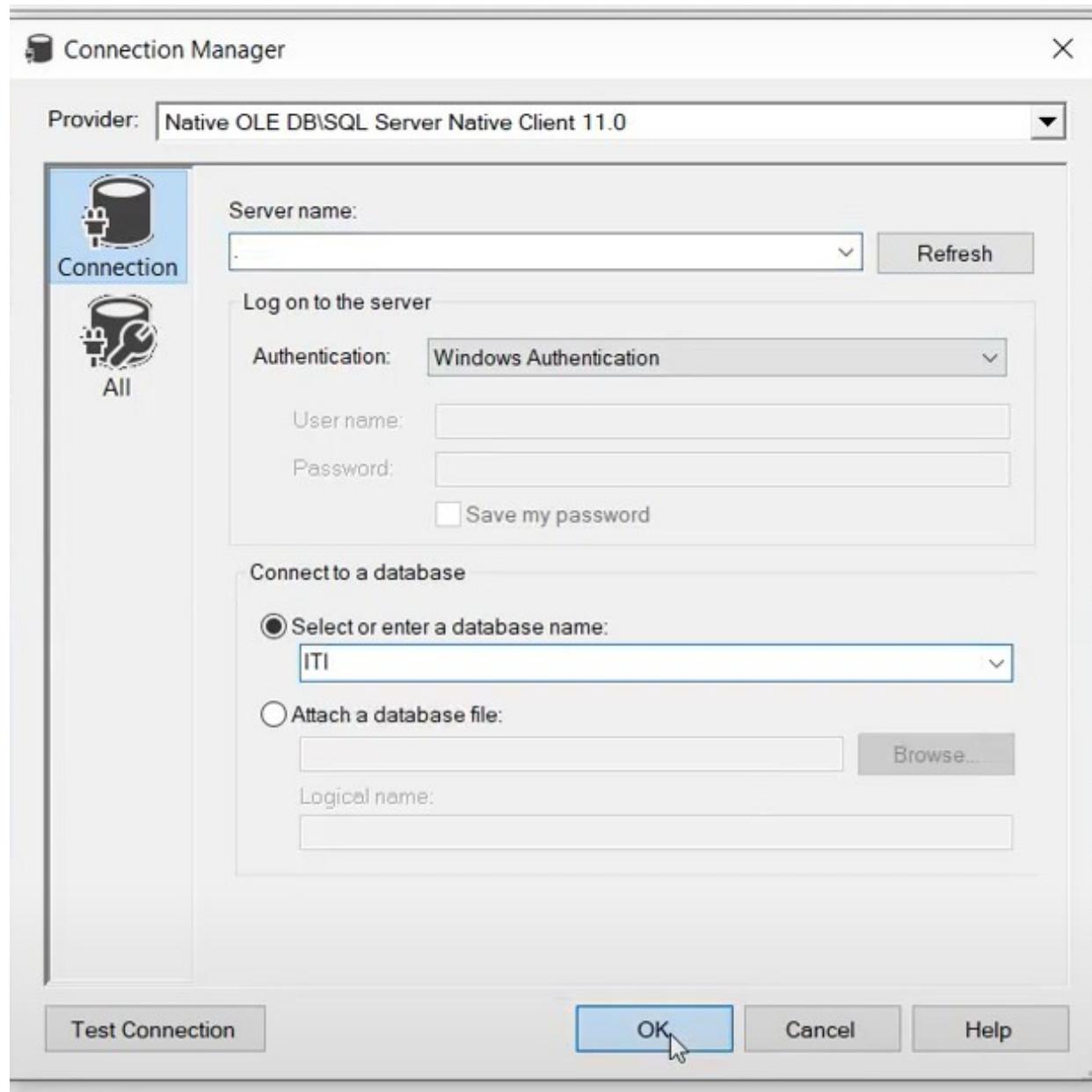
print("Control Flow>>Data Flow Task>>Double-Click")

Control Flow>>Data Flow Task>>Double-Click

```

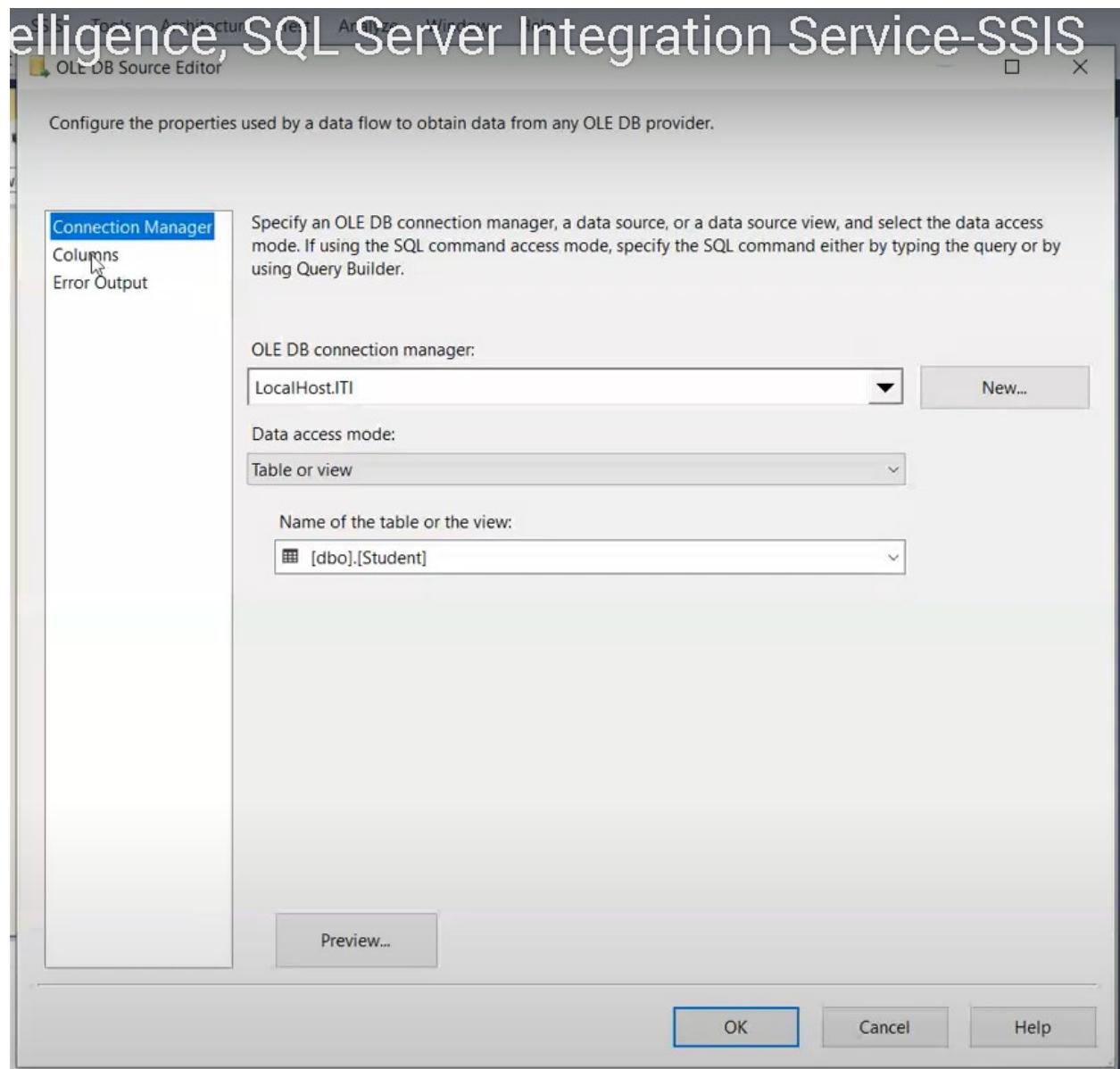


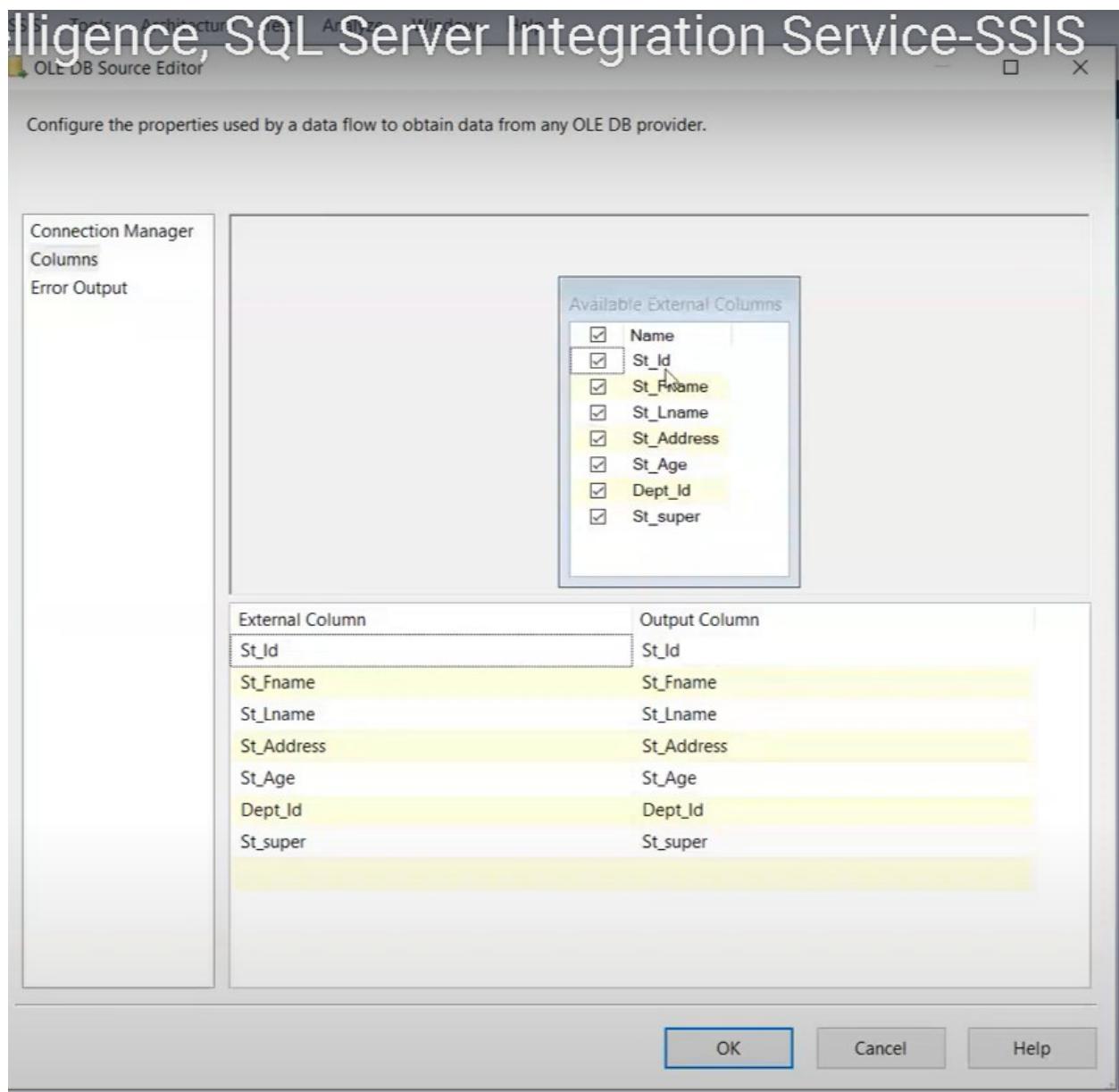




```
print("OK>>Double-Click")
```

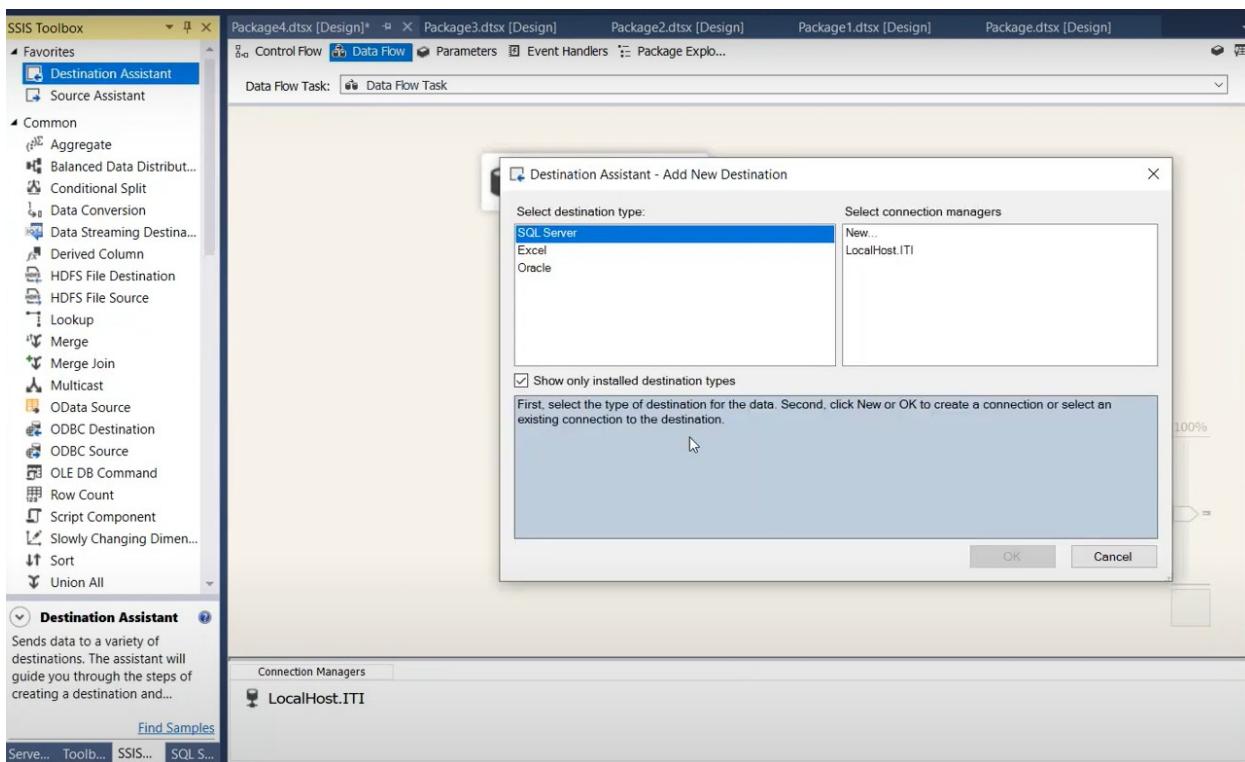
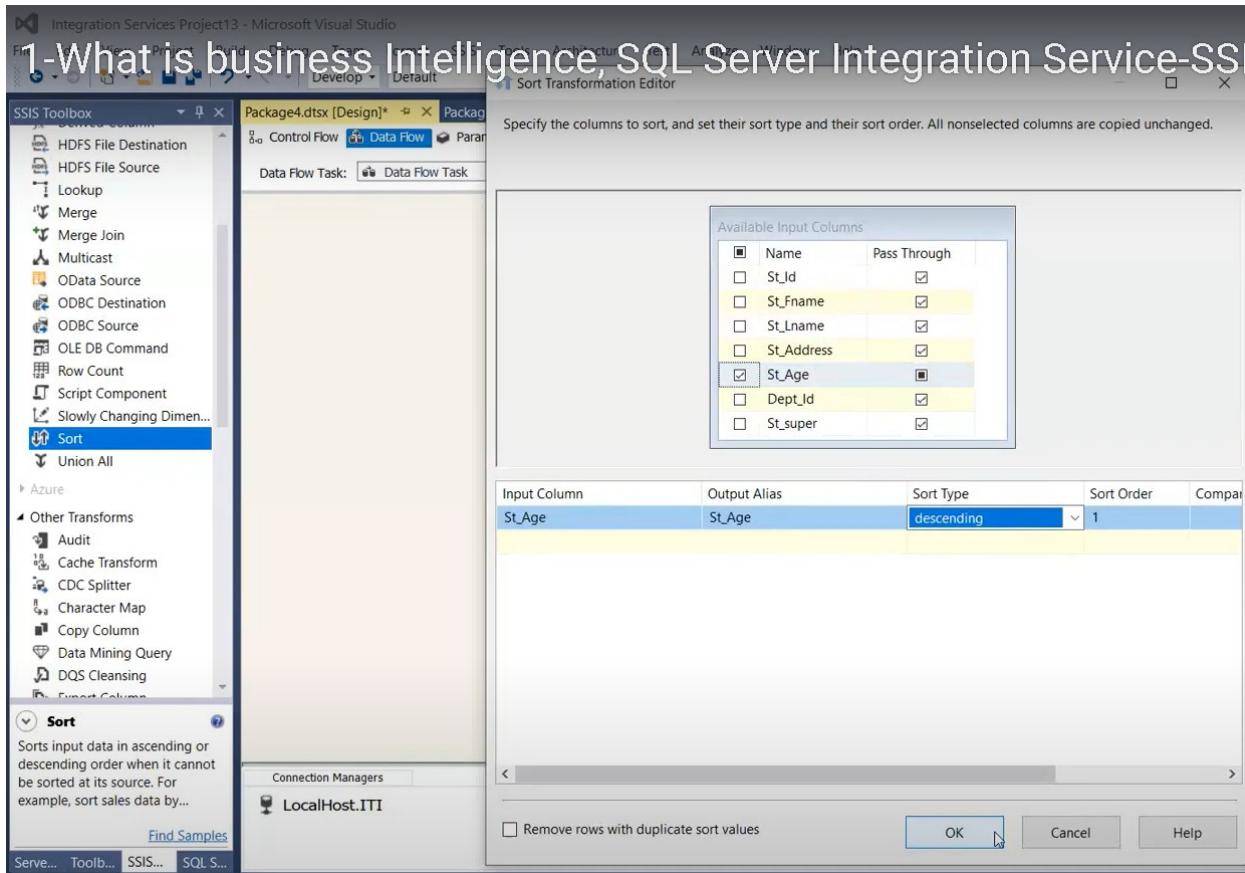
```
OK>>Double-Click
```

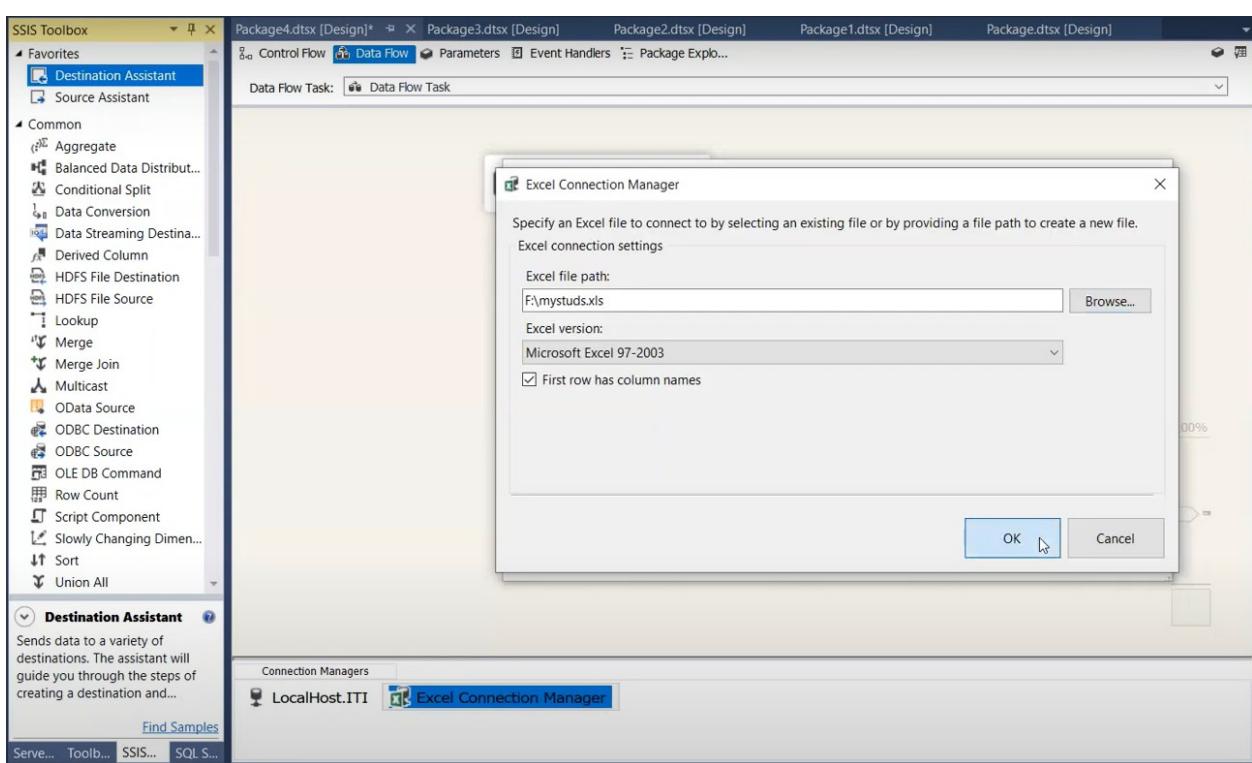
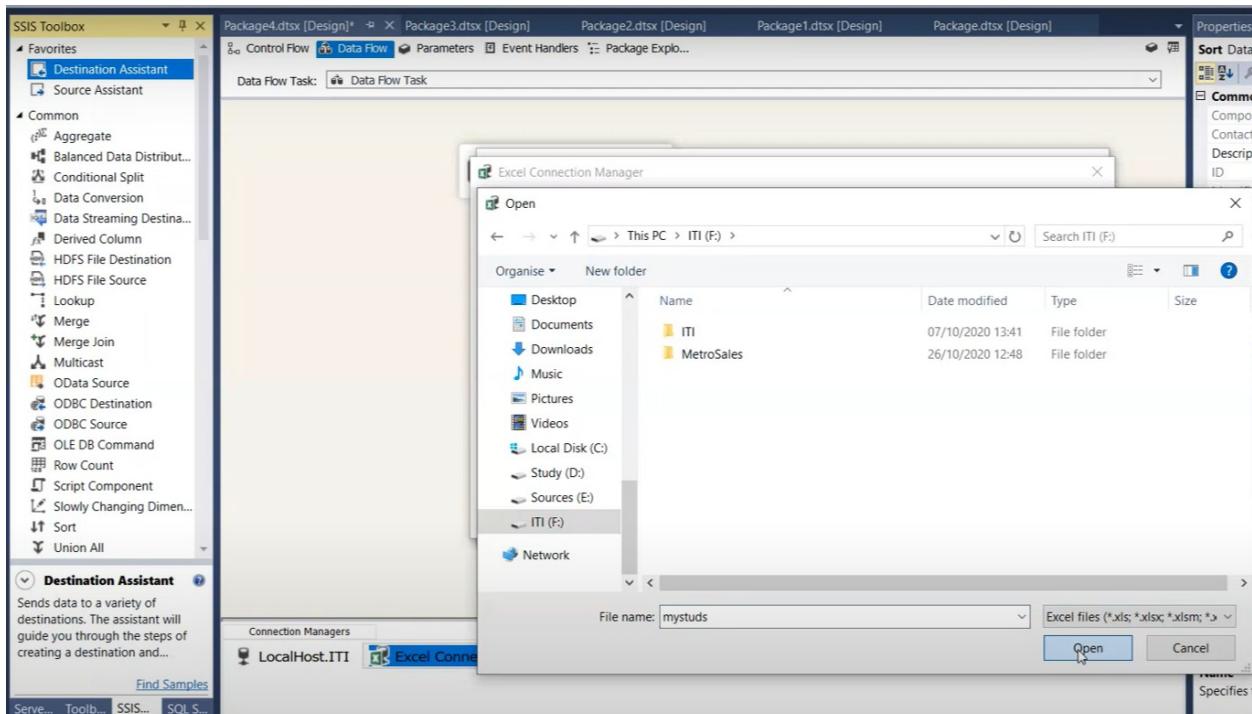


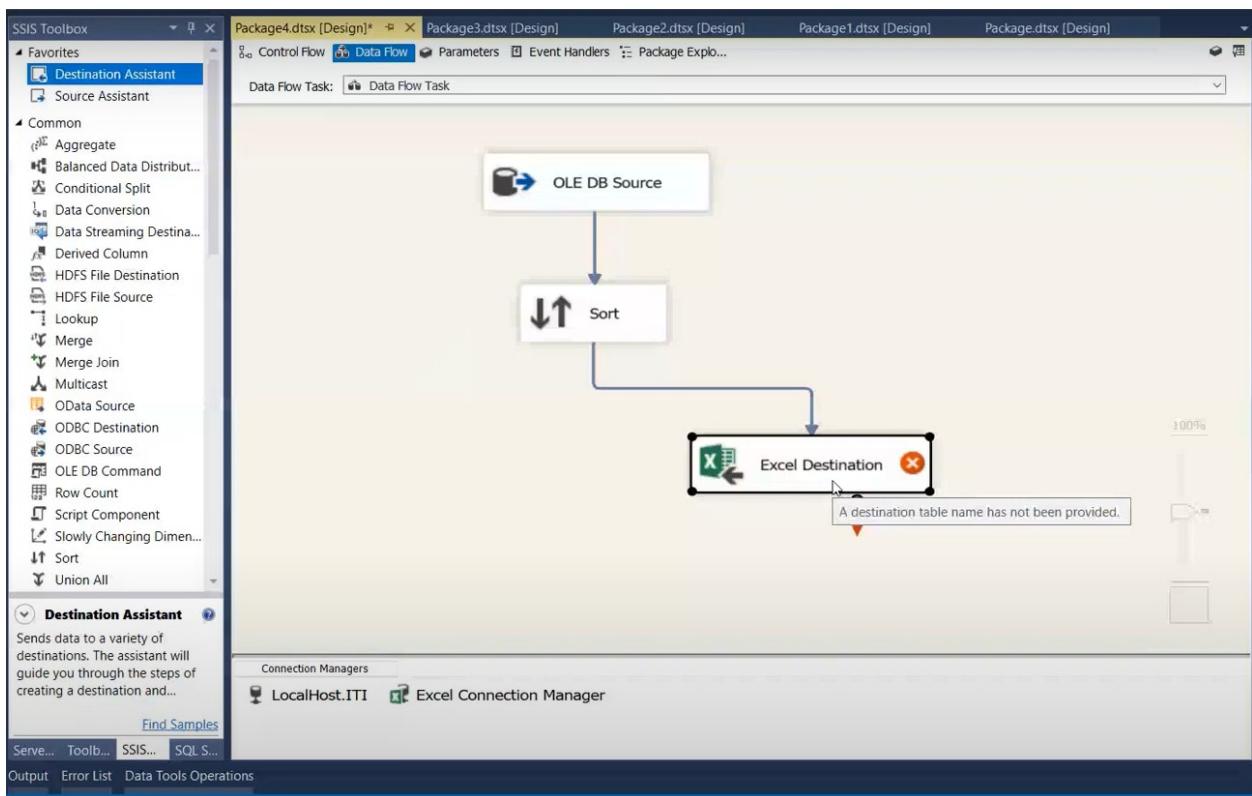


```
print(">>Read the Table<<")  
>>Read the Table<<  
print("Than Make Sort")  
Than Make Sort
```

1-What is business Intelligence, SQL Server Integration Service-SSIS

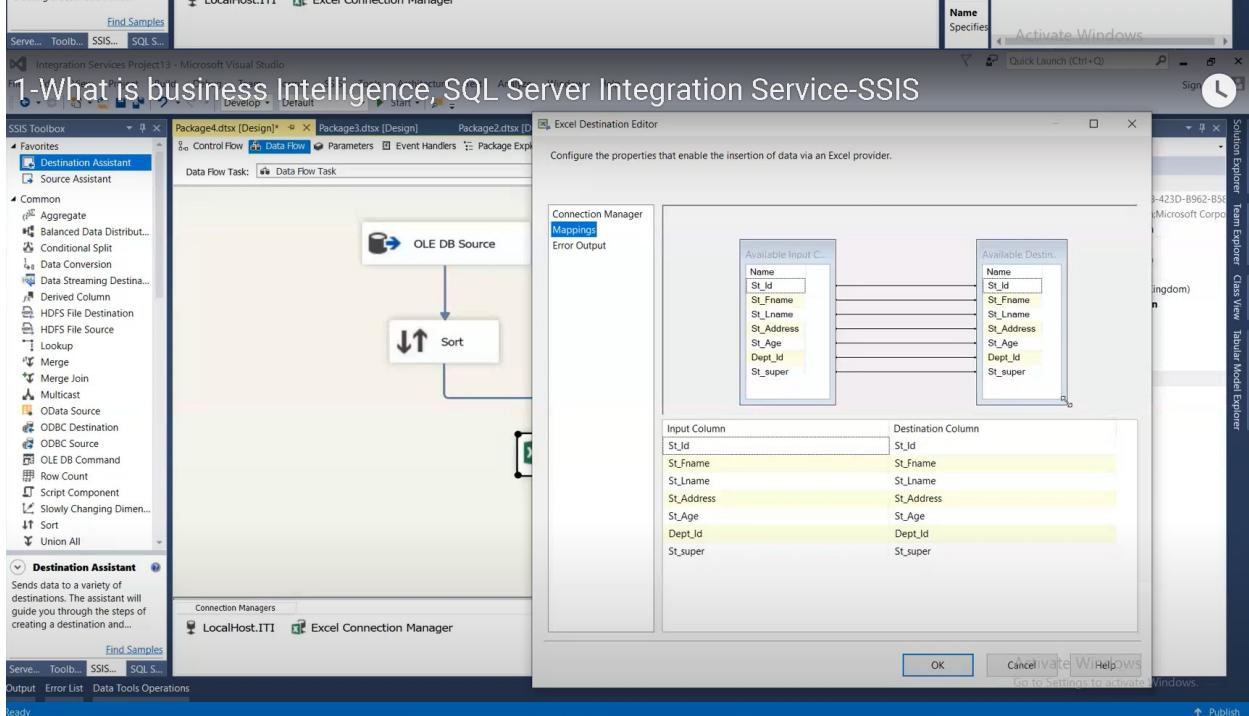
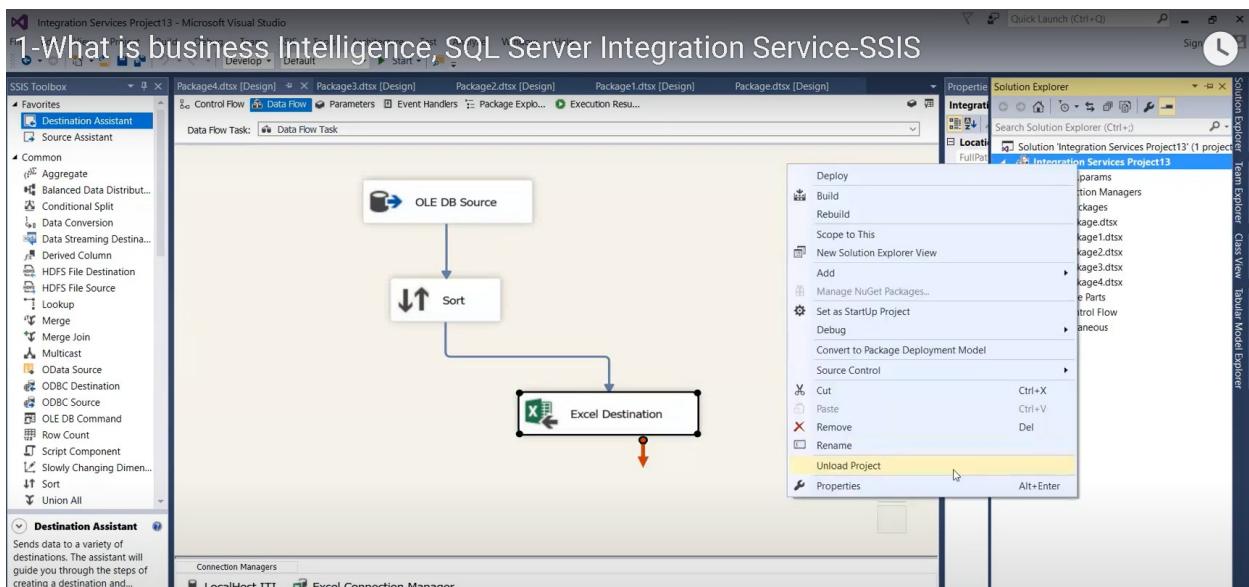


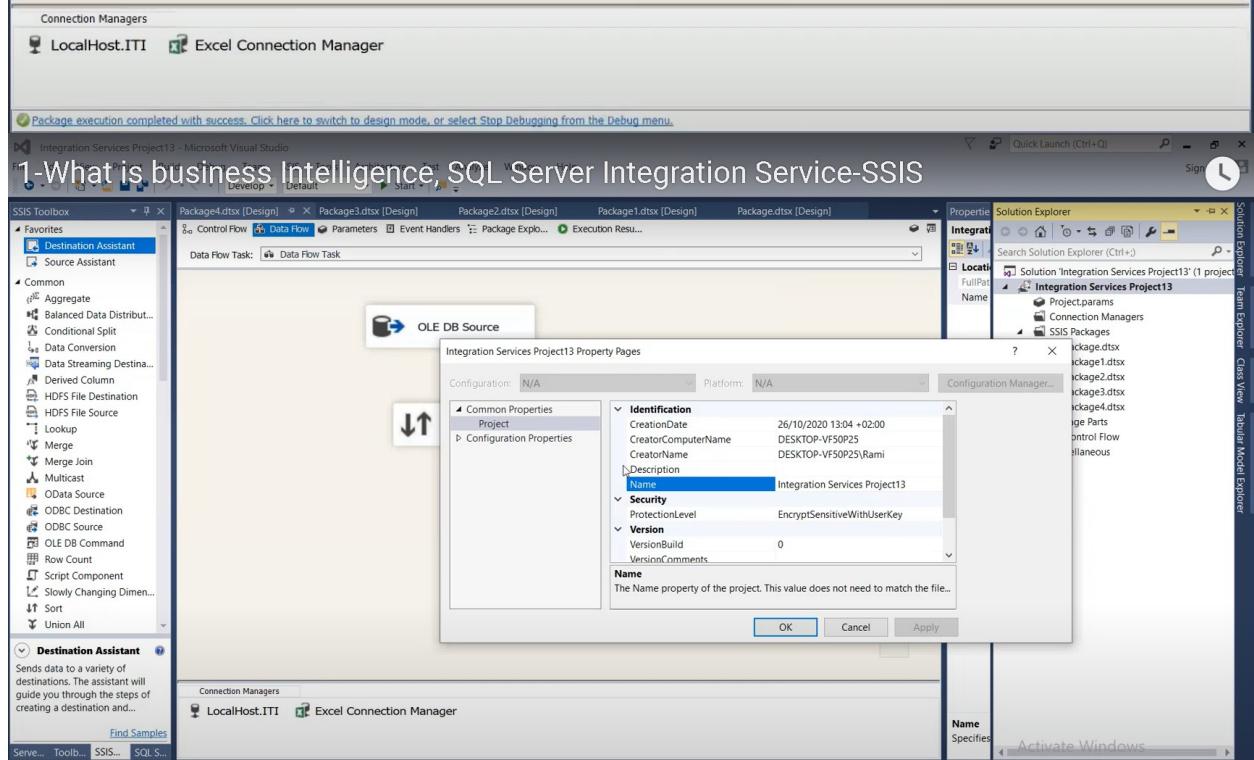
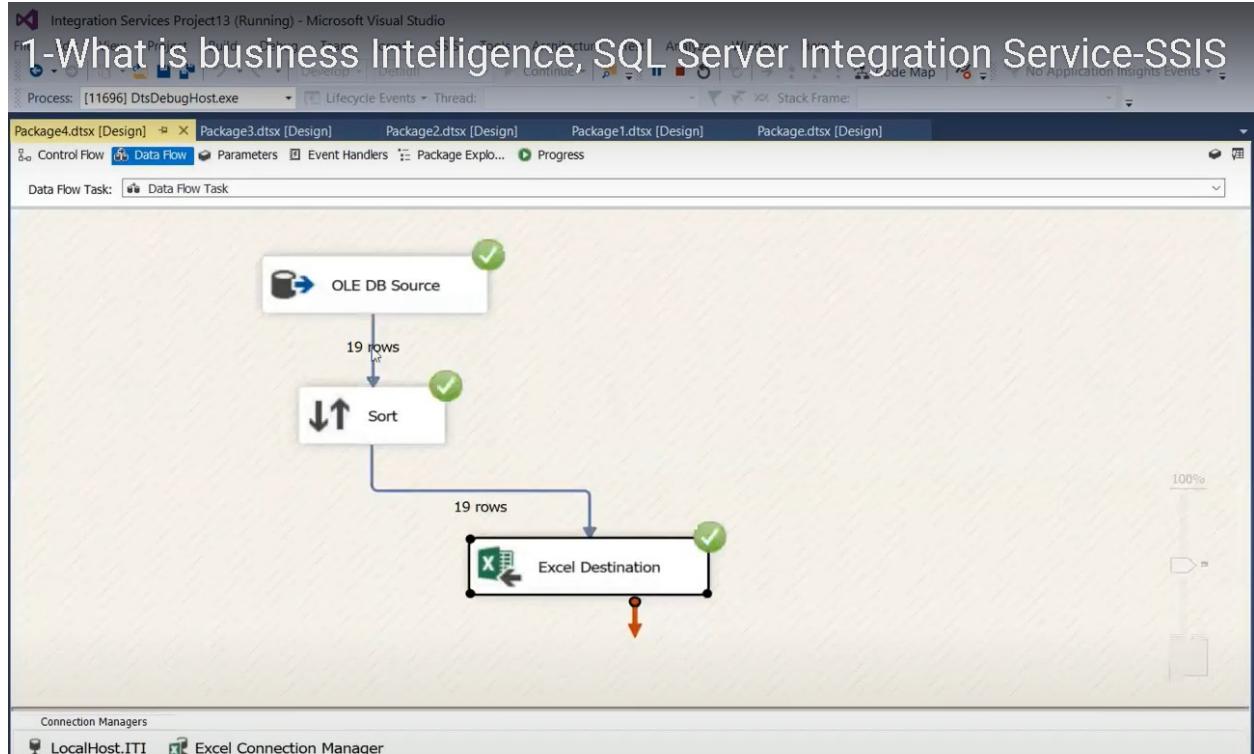


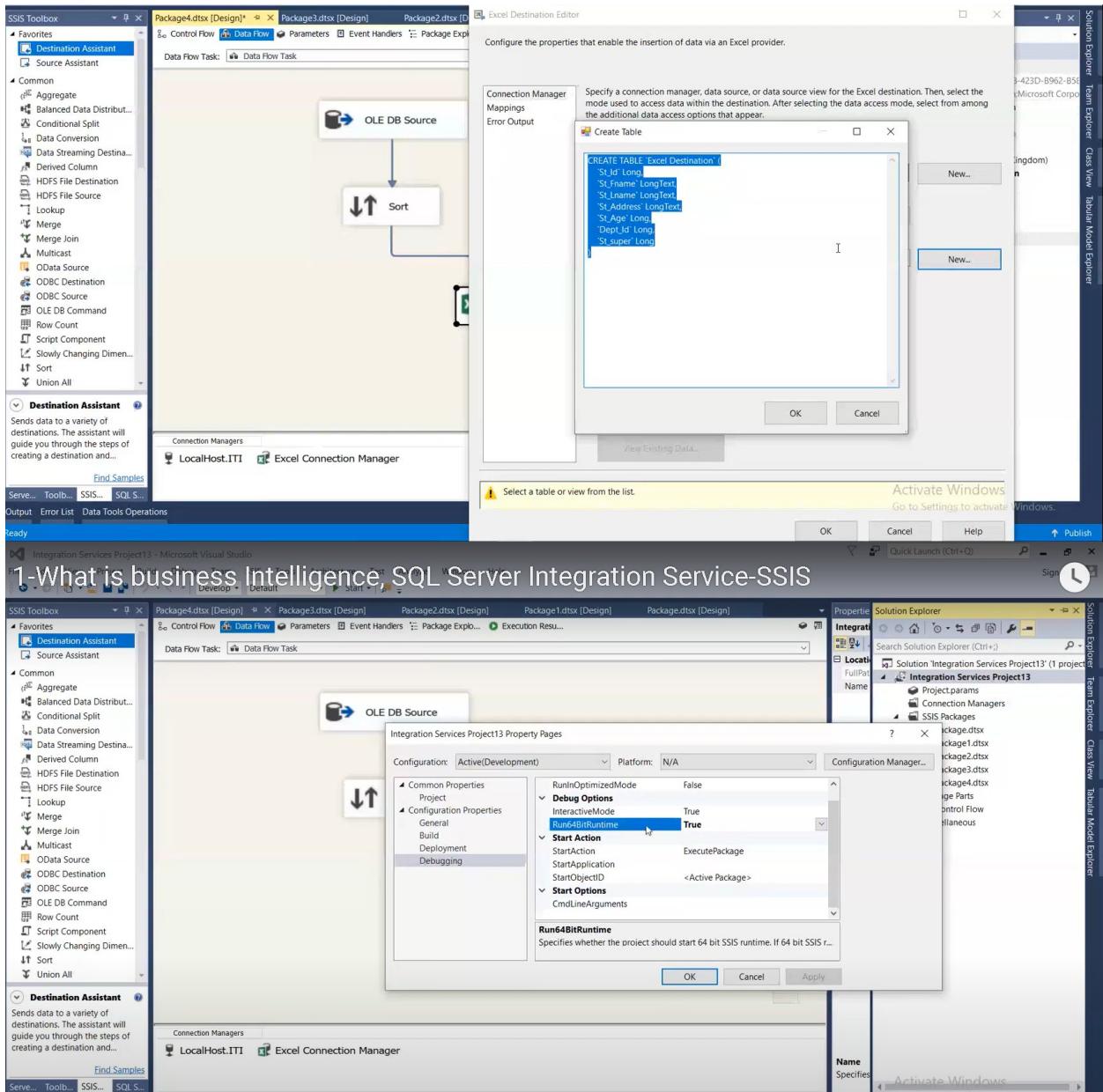


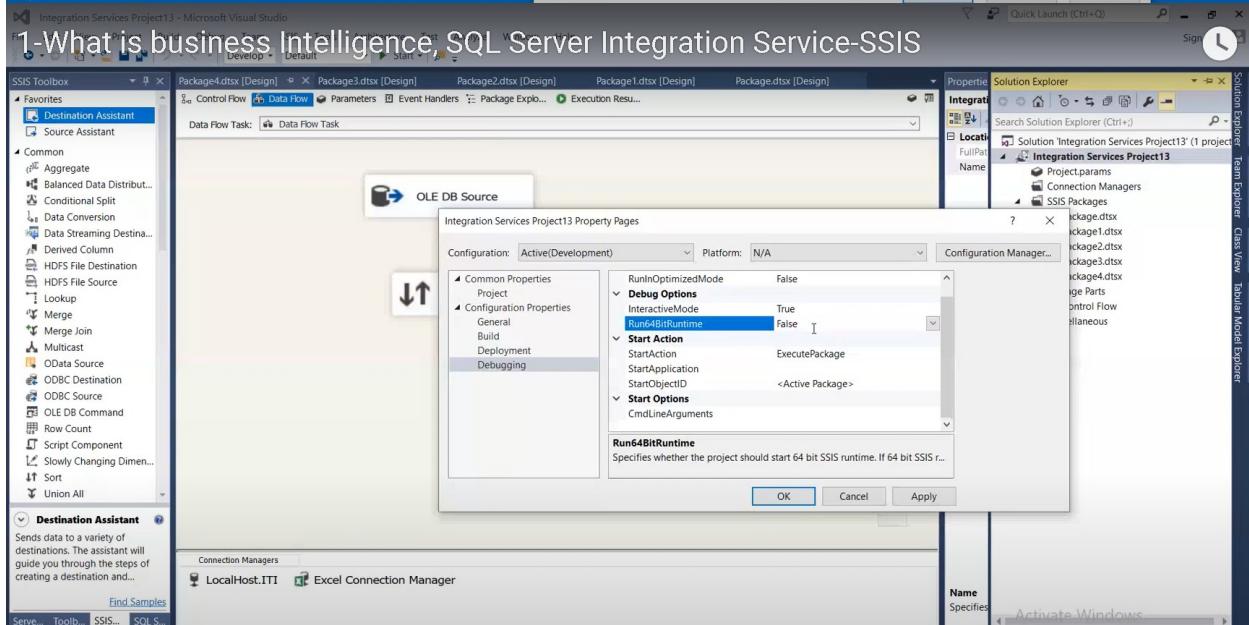
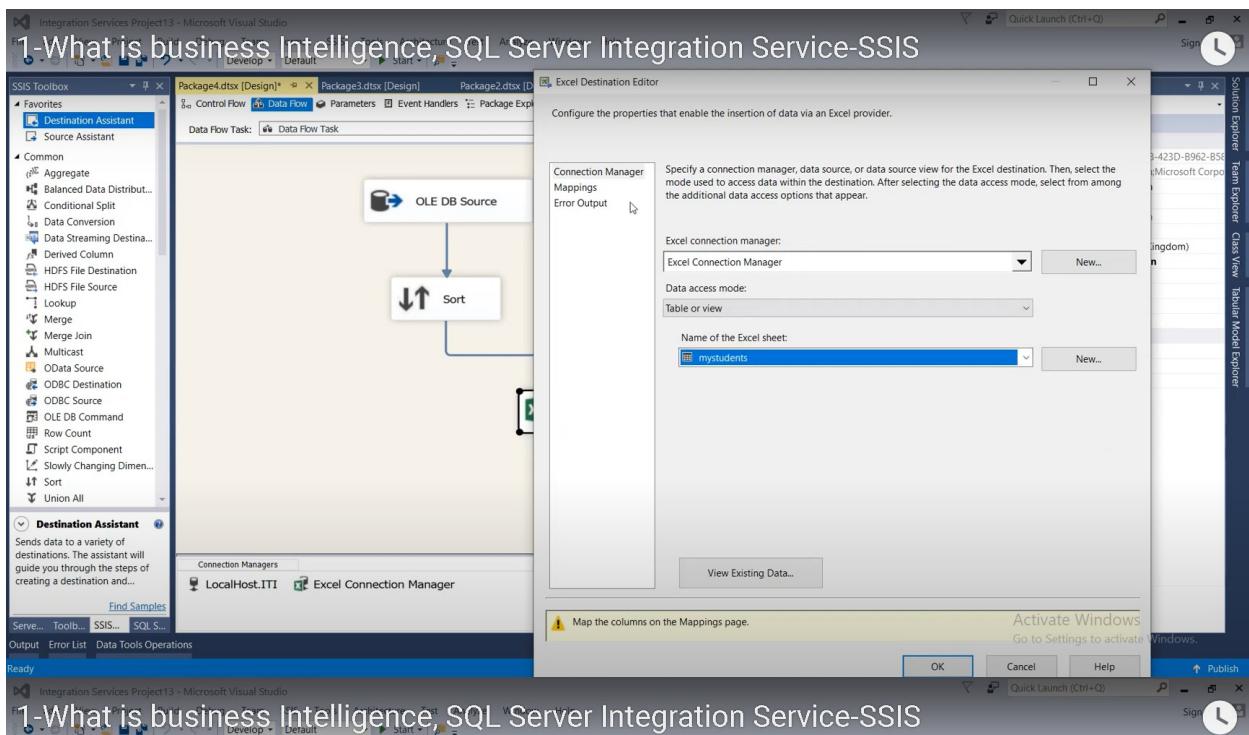
Business Intelligence, SQL Server Integration Service-SSIS

The screenshot displays the Microsoft Visual Studio interface for developing SQL Server Integration Services (SSIS) packages. The main window shows the Data Flow Editor for a package named "Package4.dtsx". The Data Flow pane shows a sequence of components: an OLE DB Source followed by a Sort component. The Sort component has two outputs: one leading to a Data Flow Task and another leading to the "Excel Destination Editor" dialog. This dialog is titled "Configure the properties that enable the insertion of data via an Excel provider". It contains tabs for "Connection Manager", "Mappings", and "Error Output". The "Mappings" tab is selected, showing the "Available Inputs" and "Available Destinations" lists, and a central grid mapping input columns to destination columns. The "Properties" window on the right shows the "Excel Destination" properties, including "Name" (Excel Destination), "ConnectionString" (localhost.iti), and "AccessMode" (OpenRowset). A warning message in the foreground states: "Select a table or view from the list." The status bar at the bottom right indicates: "Activate Windows Go to Settings to activate Windows".









ITI
MetroSales
ITI_backup_2020_10_26_131334_5450018.bak
mystuds.xls

07/10/2020 13:41 File folder
26/10/2020 12:48 File folder
26/10/2020 13:13 BAK File 3,220 KB
26/10/2020 13:40 Microsoft Excel 97 13 KB

mystuds.xls [Compatibility Mode] - Excel (Product Activation Failed)

File Home Insert Page Layout Formulas Data Review View Add-ins Team Tell me what you want to do..

MS Sans Serif 10 A A Wrap Text General Conditional Format as Table Styles

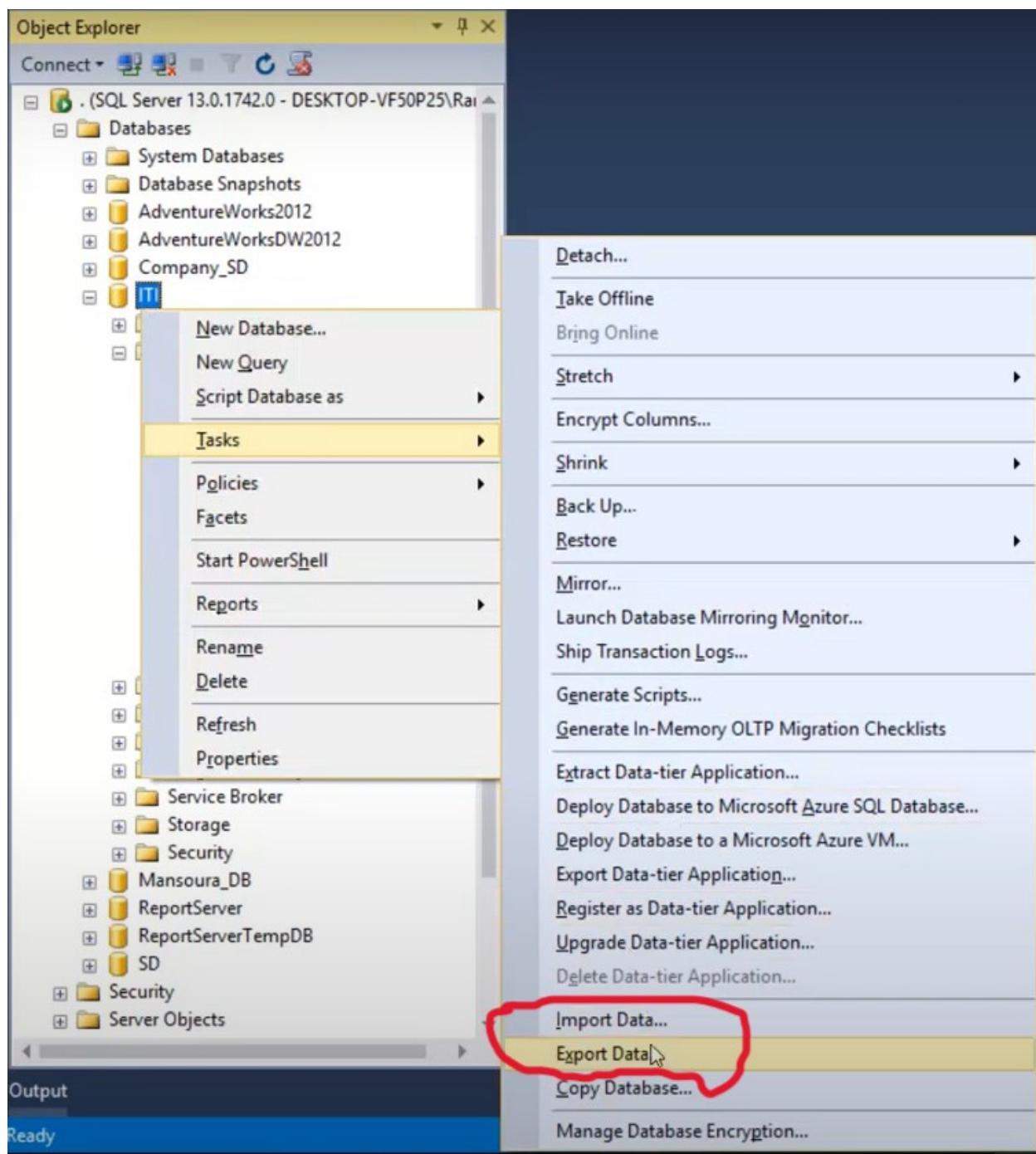
Font Alignment Number Styles

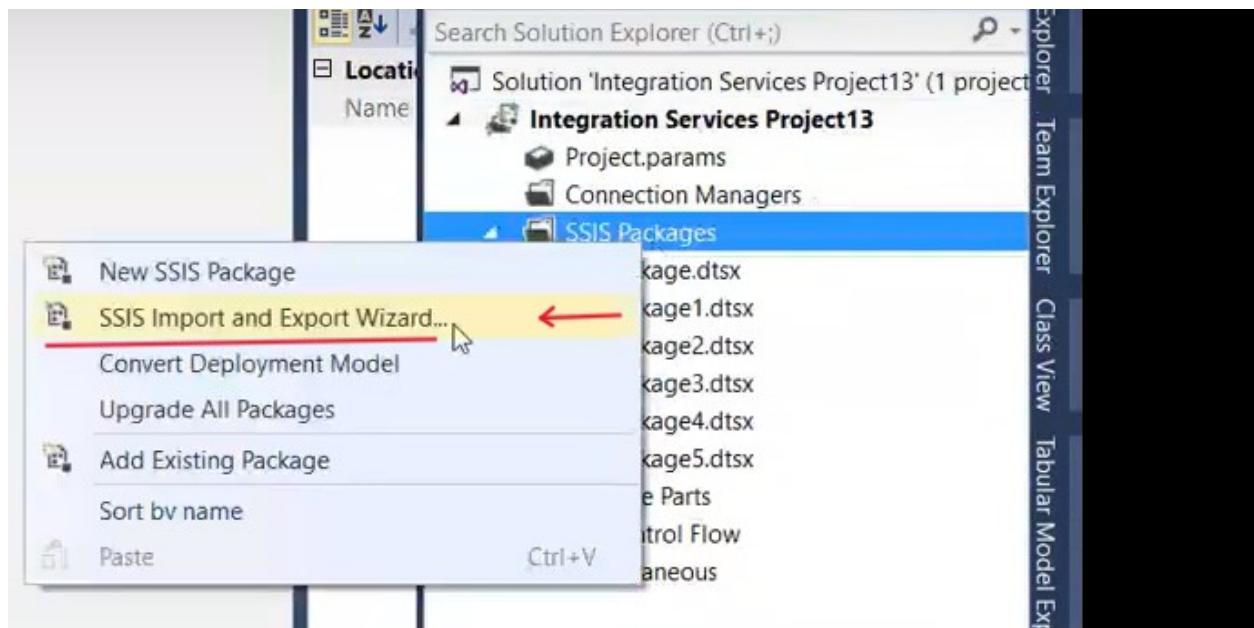
Clipboard 19R x 2C : X ✓ fx 28

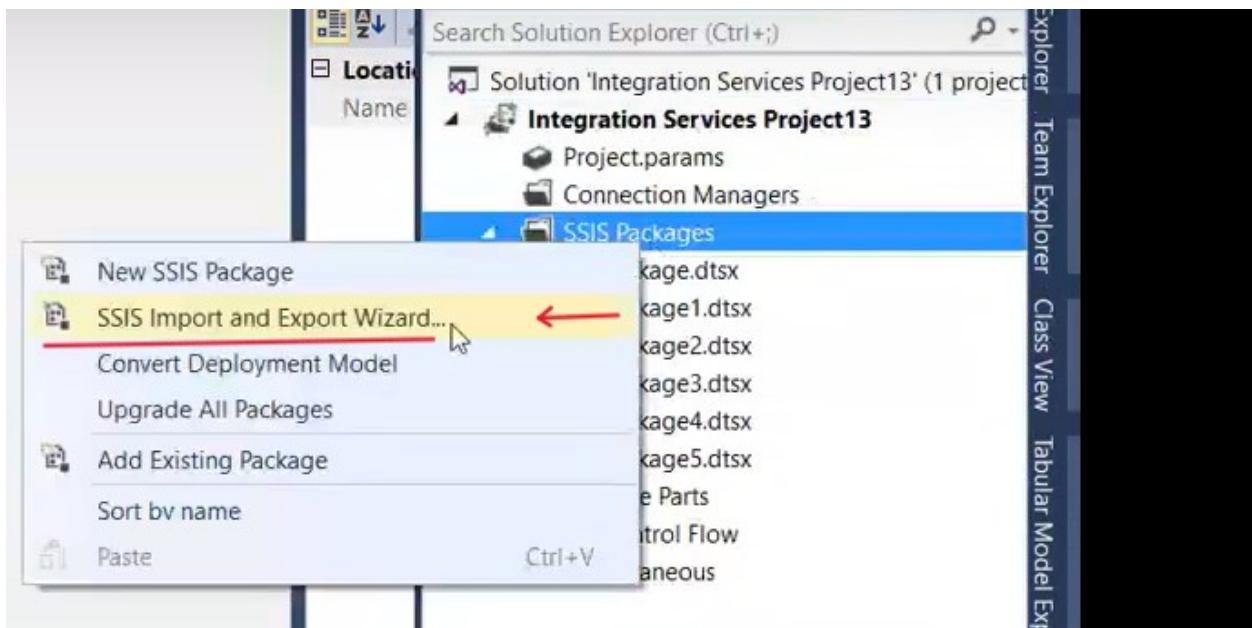
A B C D E F G H I J K L

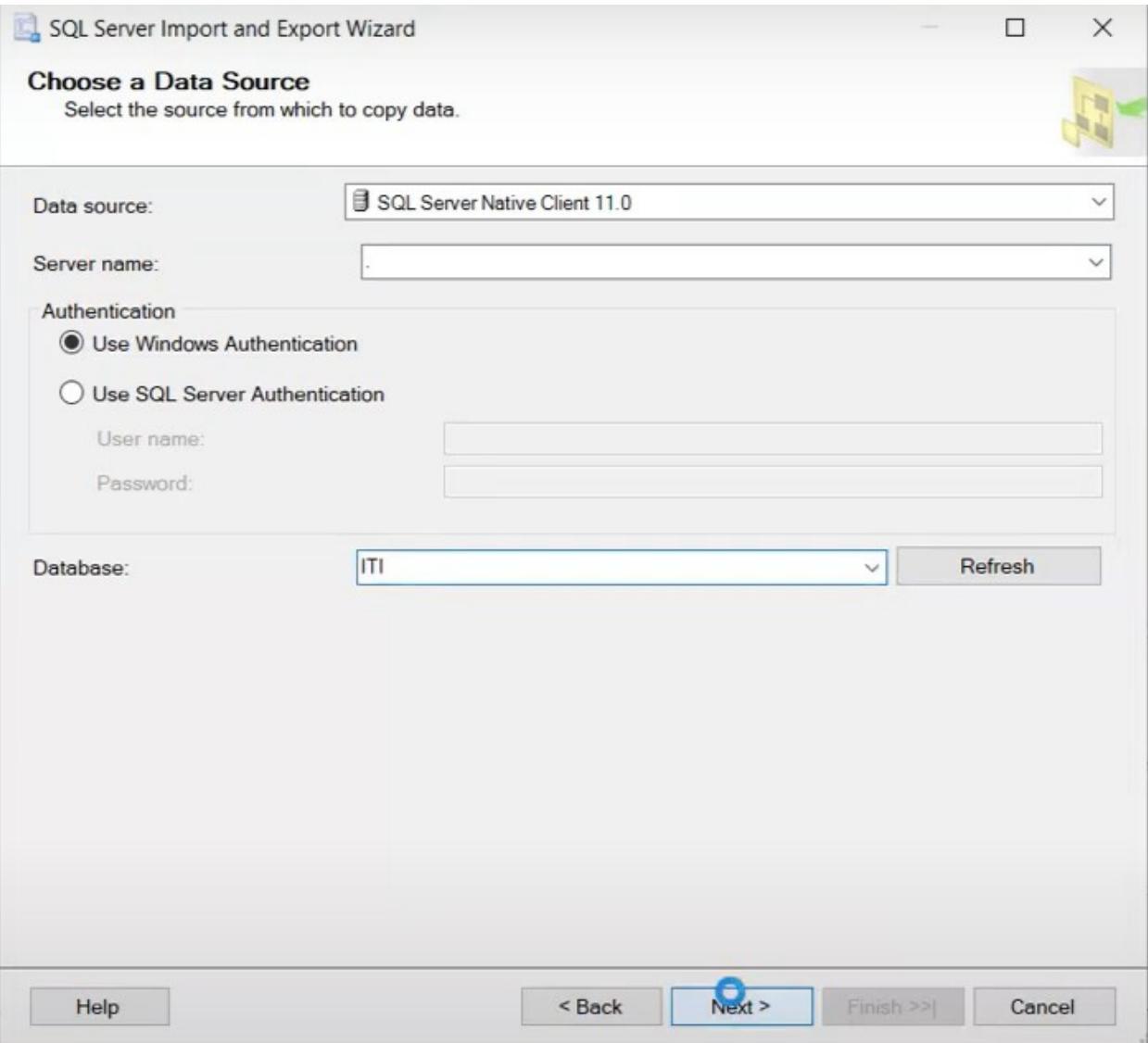
1	A	B	C	D	E	F	G	H	I	J	K	L
1	St_Id	St_Fname	St_Lname	St_Addres	St_Age	Dept_Id	St_super					
2	8	Mona	Saleh	Cairo	28	10	1					
3	8			Alex	28	20	6					
4	17	Y			25	30						
5	44				25	30						
6	16				25	30						
7	6	Heba	Farouk	Mansoura	25	20						
8	7	Ali	Hussien	Cairo	25	20	6					
9	11	mohamed	Ahmed	Cairo	24	20	9					
10	9	Saly	Ahmed	Mansoura	24	20						
11	5		Moahmed	Alex	24	10	1					
12	10	Fady	Ali	Alex	24	20	9					
13	4		Mohamed	Alex	23	10	1					
14	13	Said			22	30	12					
15	14	omar	Saleh	Tanta	22	30						
16	15	X			22	30						
17	2	Amr	Magdy	Cairo	21	10	1					
18	12	Noha	Omar	Cairo	21	30						
19	1	Ahmed	Hassan	Cairo	20	10						
20	100	omar	+									
21												
22												
23												

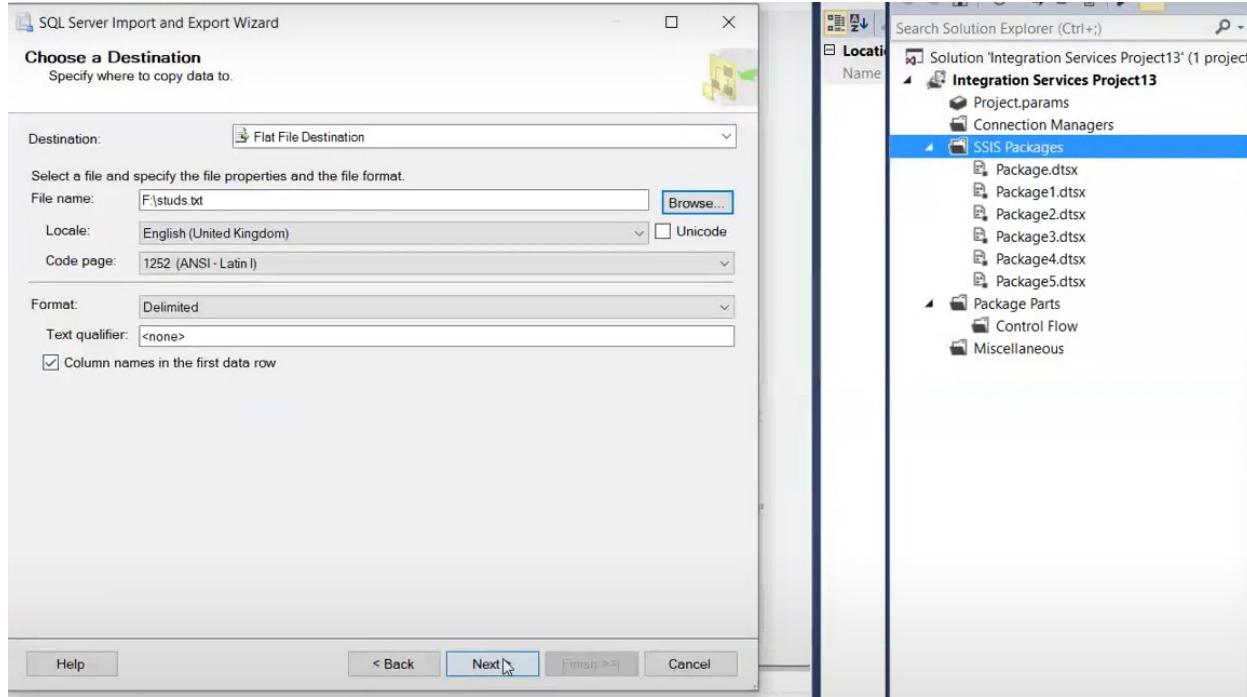
mystudents Ready Average: 23.7771

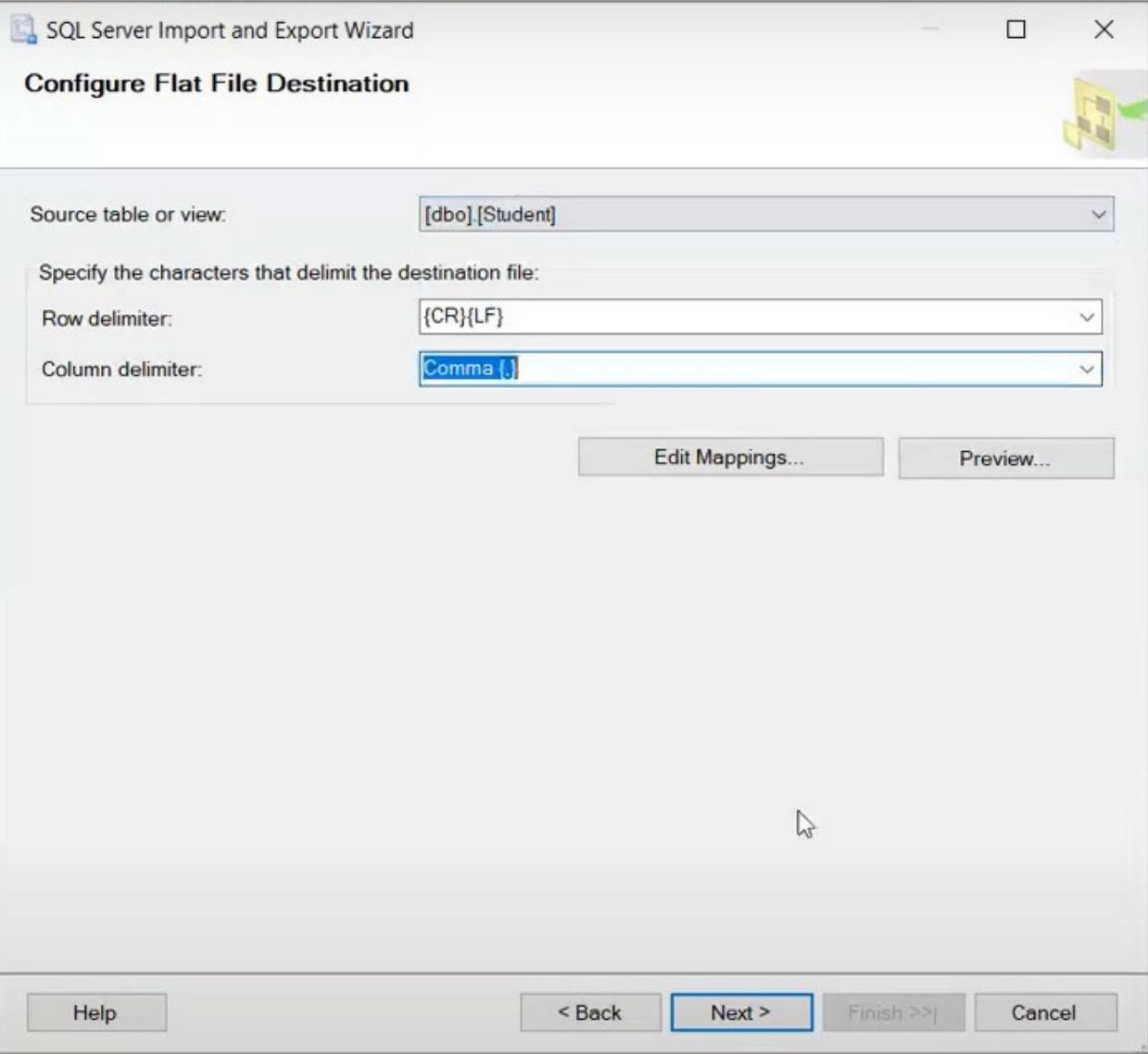


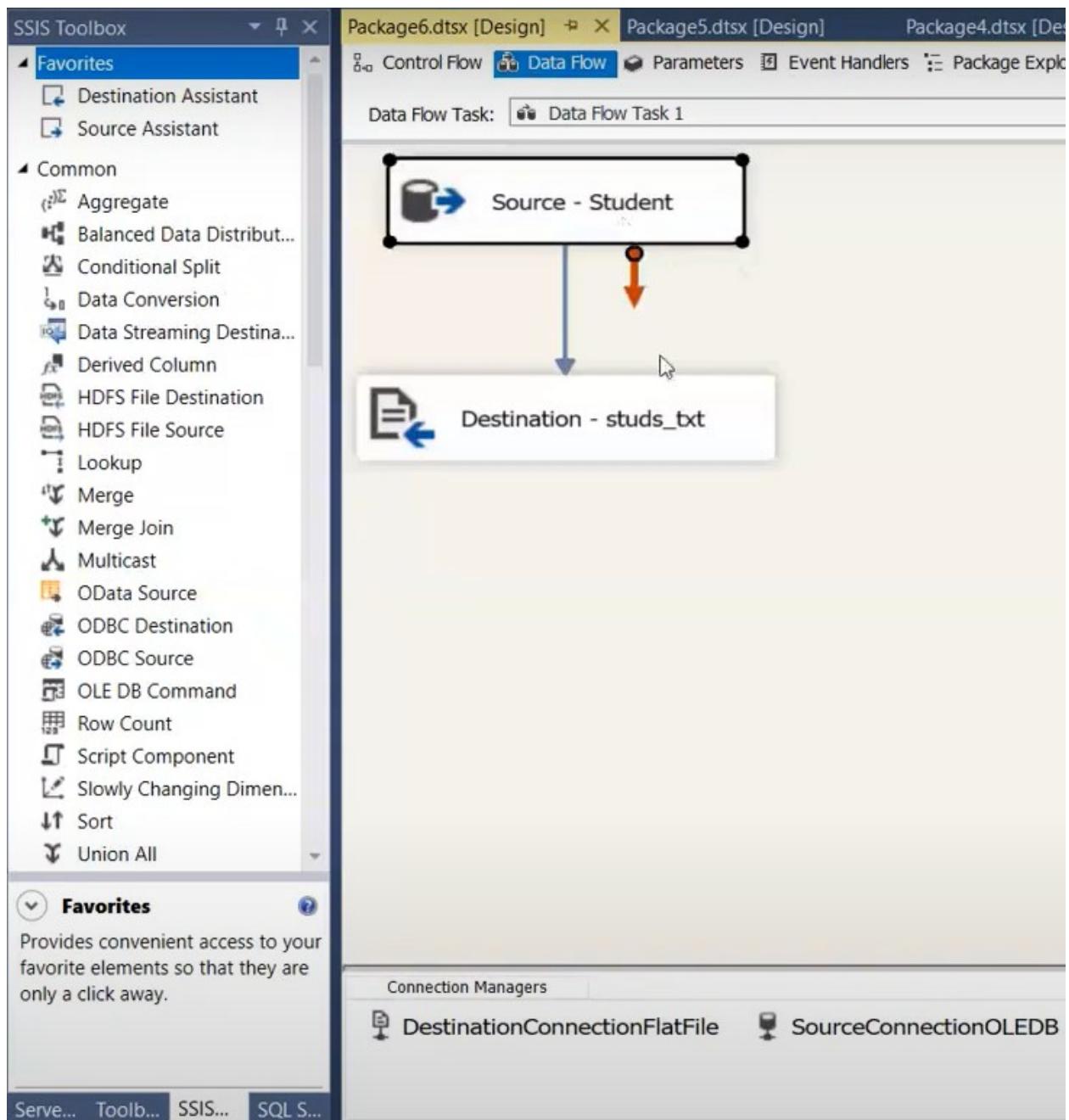


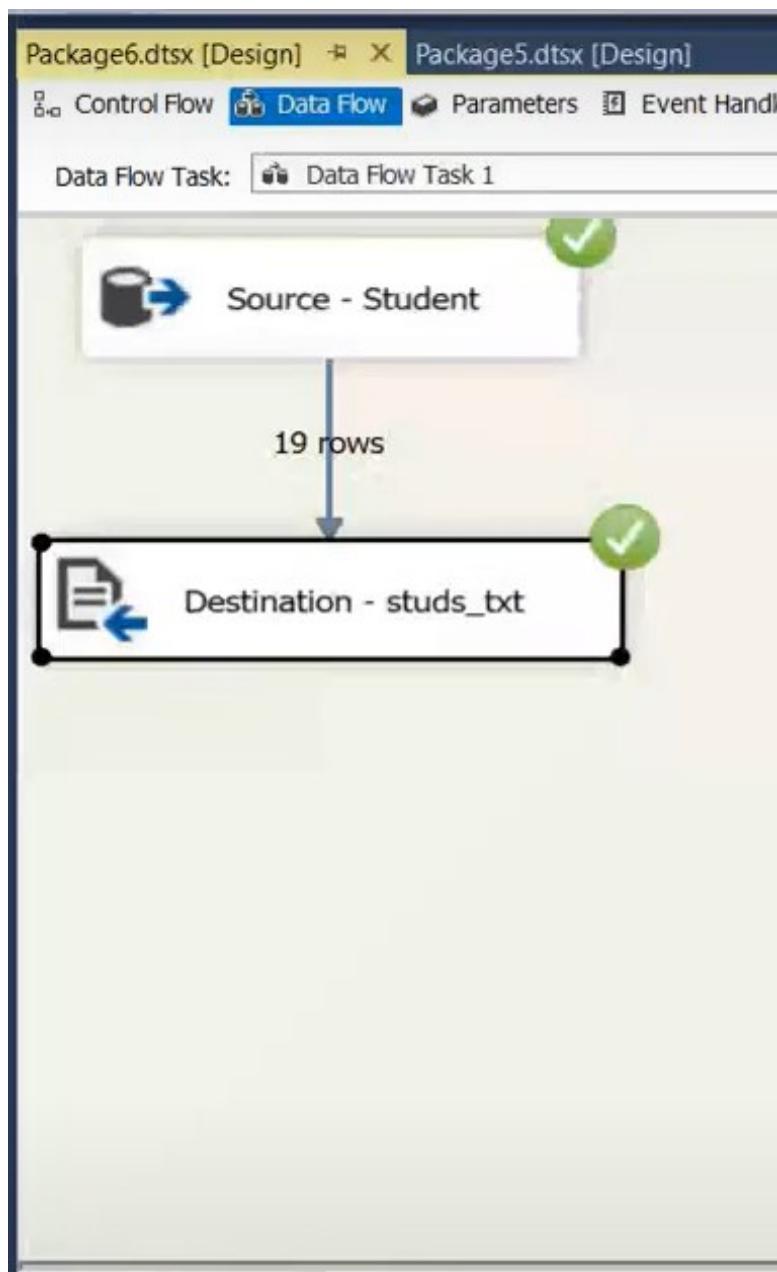




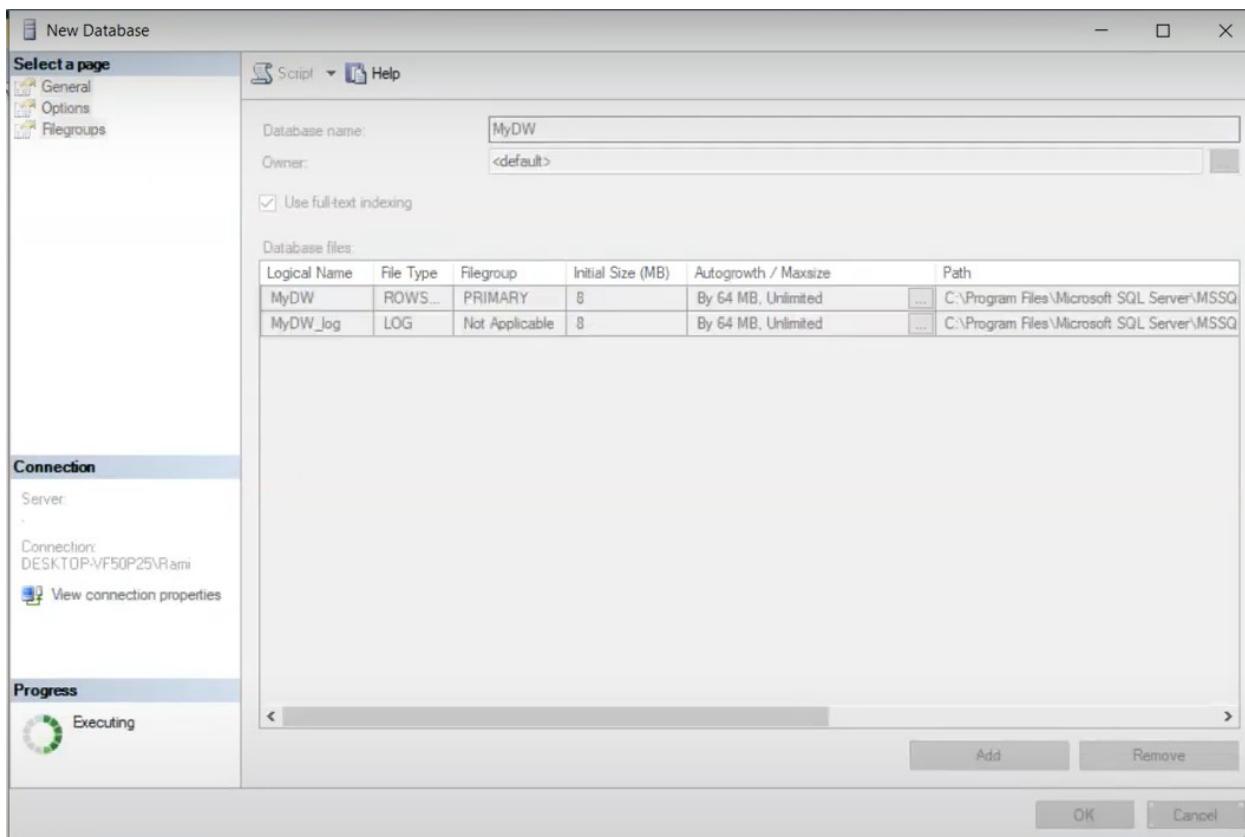








```
print("My Data Warehouse")
My Data Warehouse
print("Create Database My Data Warehouse")
Create Database My Data Warehouse
```



```
print("From Excel to Dimension Table")
From Excel to Dimension Table
print("Make New Package")
Make New Package
print("A Dimension Table")
A Dimension Table
print("Make For Data Transformation Plan Before ETL")
Make For Data Transformation Plan Before ETL
print("Convert To Dimension in DWH")
Convert To Dimension in DWH
print("SSIS Extract Transform Load Tool Build Data Warehouse")
SSIS Extract Transform Load Tool Build Data Warehouse
print("Data-Transformation-Steps-To-Build-Dimension-Table")
Data-Transformation-Steps-To-Build-Dimension-Table
```

