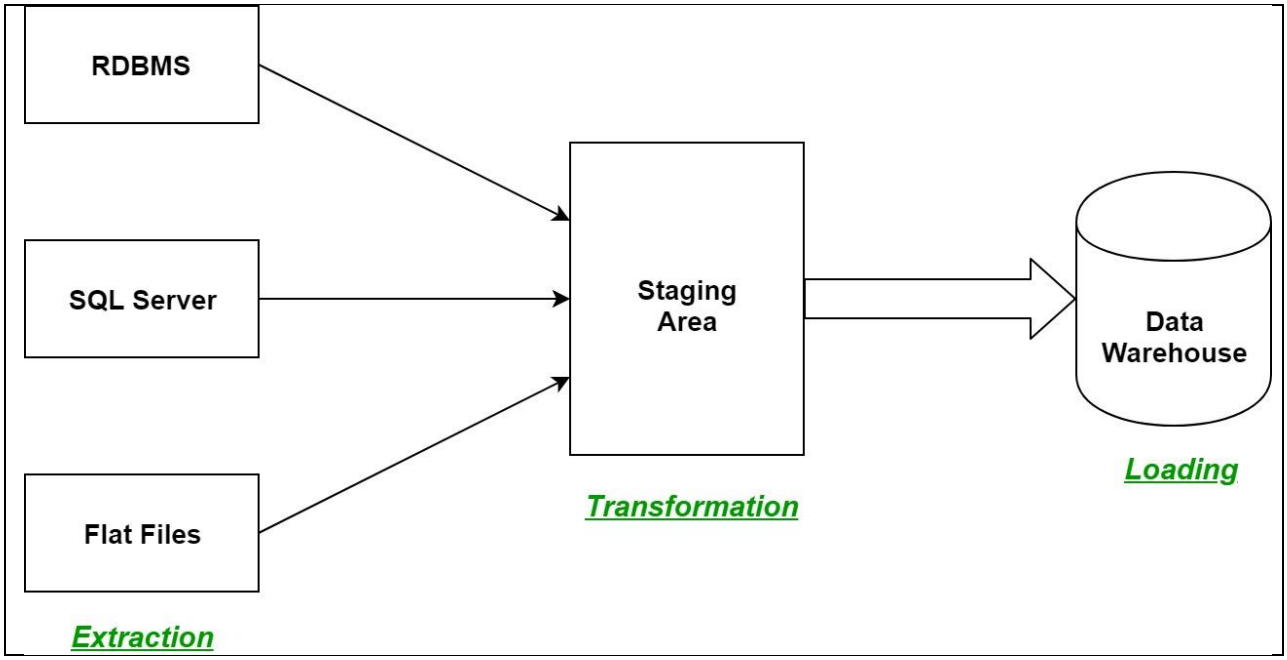
Practical No.2

Perform the Extraction Transformation and Loading (ETL) process to construct the database in the Sqlserver.

ETL(Extract, Transform and Load)

- **ETL is a process in Data Warehousing and it stands for Extract, Transform and Load.**
- **It is a process, in which an ETL tool extracts the data from various data source systems, transforms it in the staging area and then finally, loads it into the Data Warehouse system.**

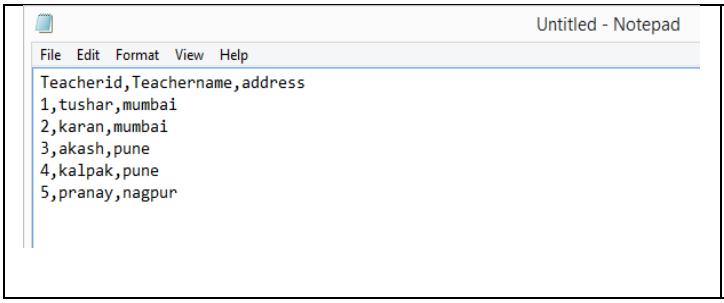


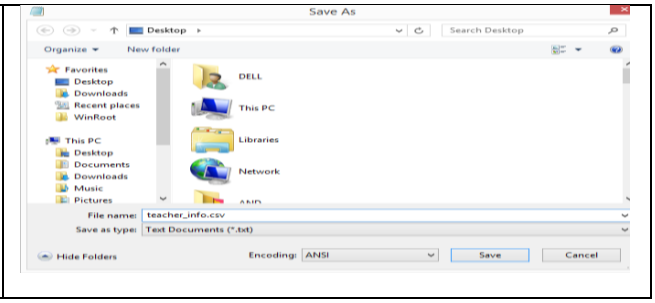
Note : For Practical No.2 we have to create .CSV file as source for ETL process.

Step1 : Open notepad, and add the following records and save the file with name teachers.csv

Comma-Separated Values(.CSV file)

A comma-separated values file is a delimited text file that uses a comma to separate values. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. The use of the comma as a field separator is the source of the name for this file format.

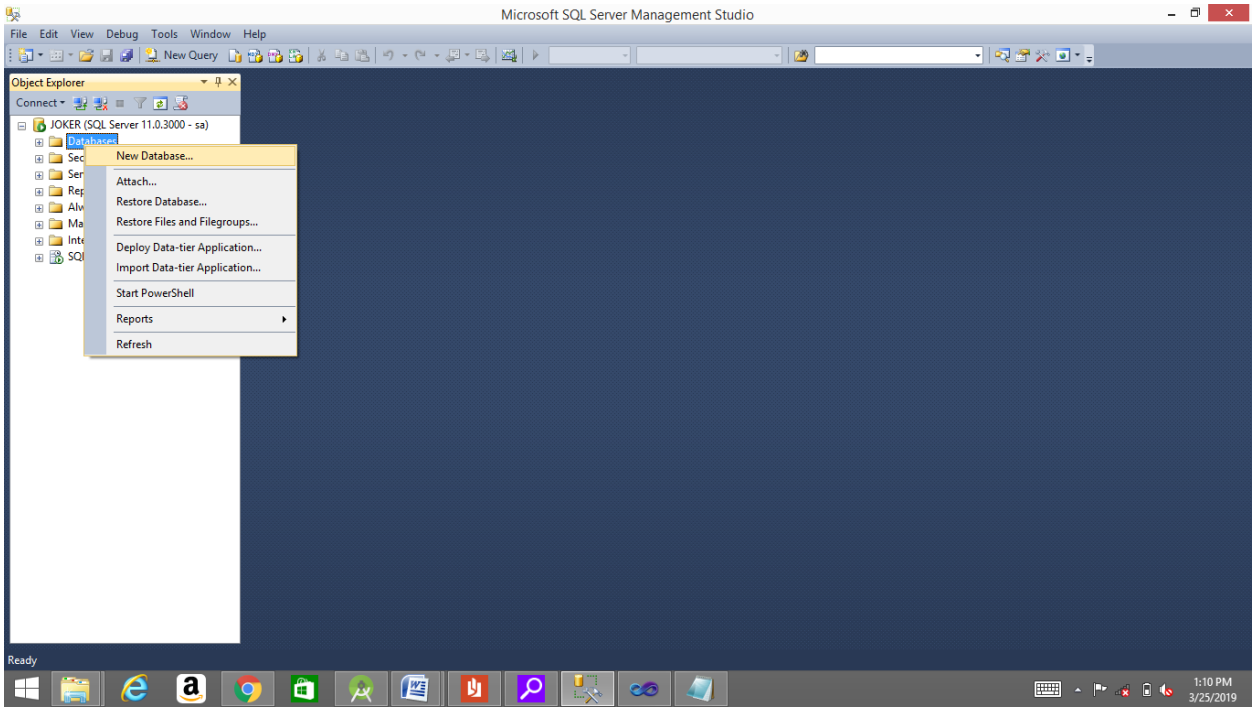


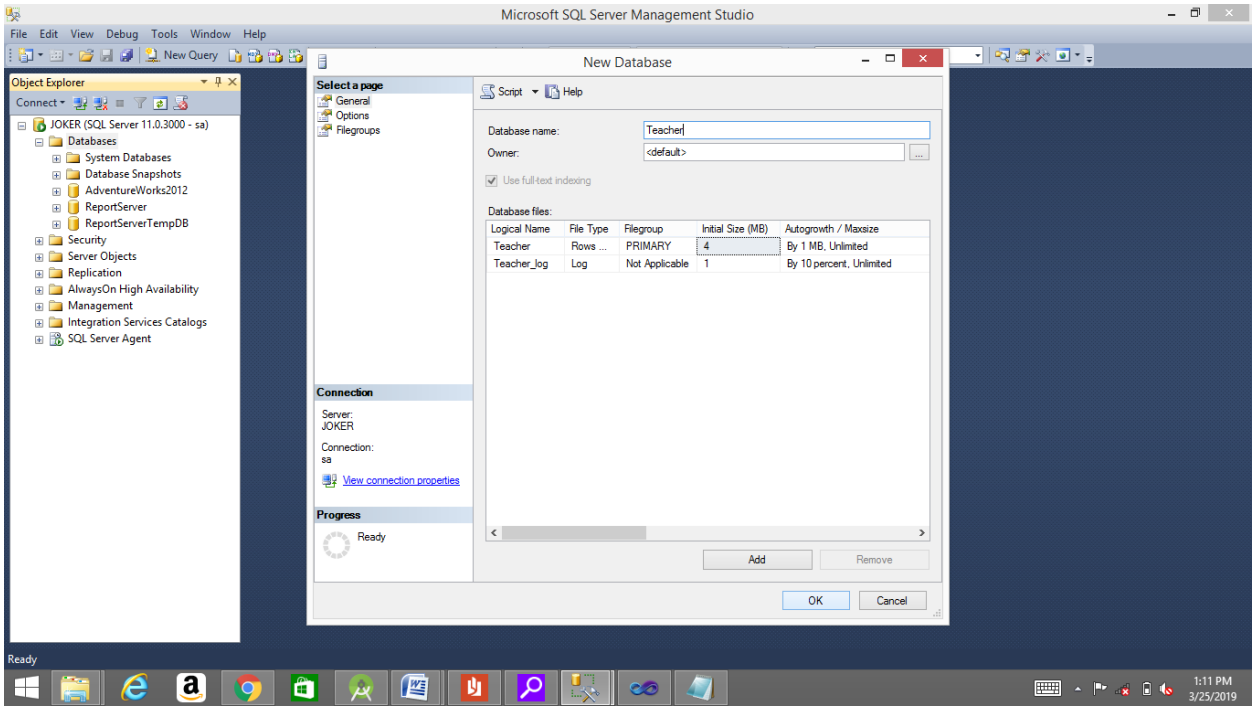


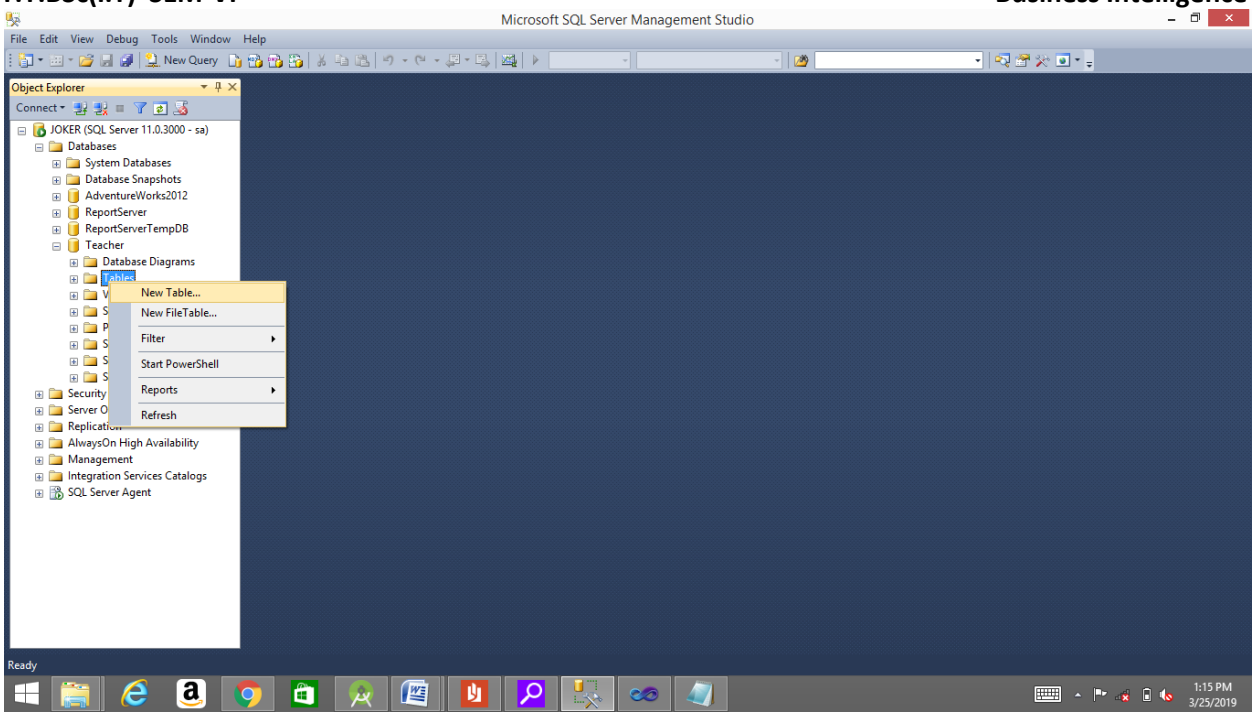
Step2: Now we will define the target in SQL SERVER Management Studio as follows.

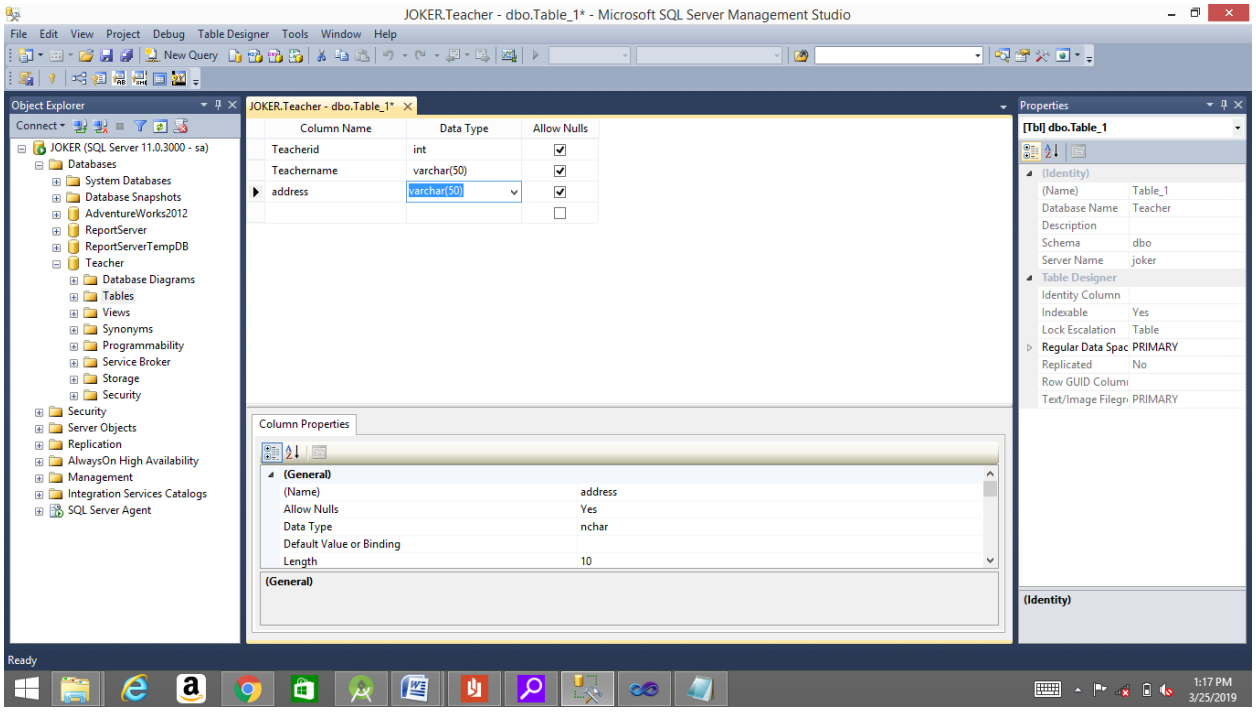
Note: Create same number of columns that we define in teachers.csv

Now Open SQL Server Management Studio and Create Database and Table.

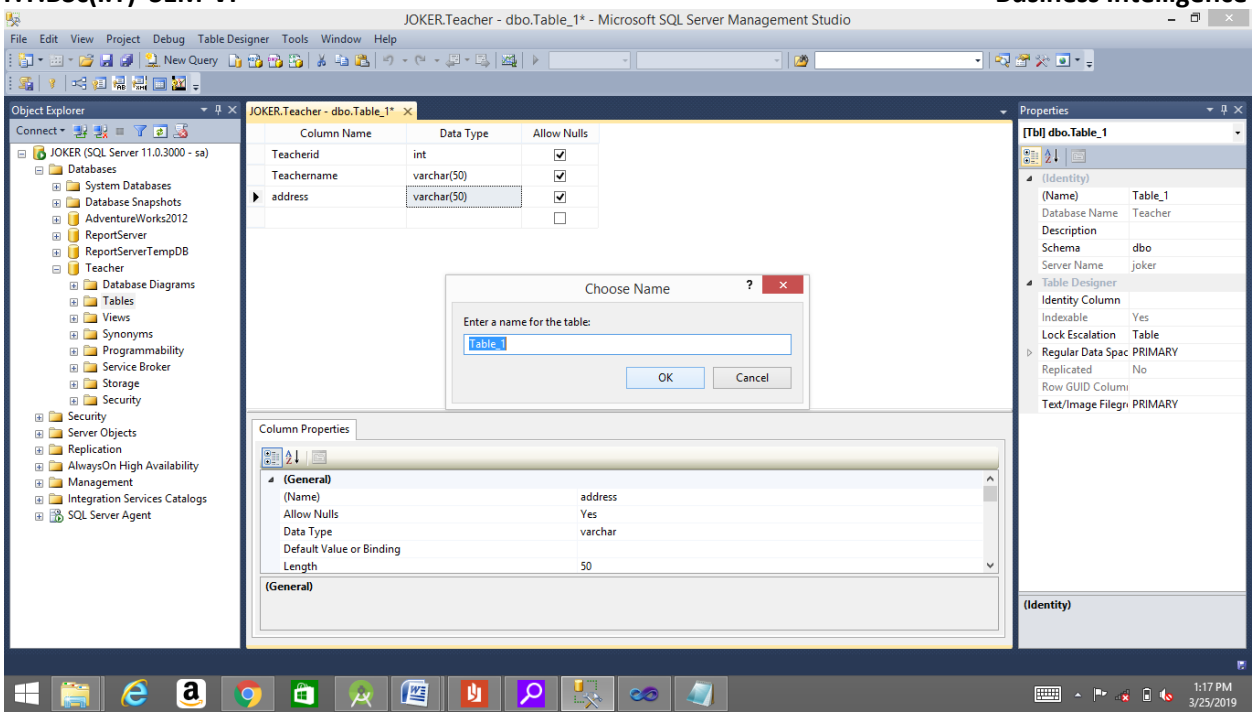




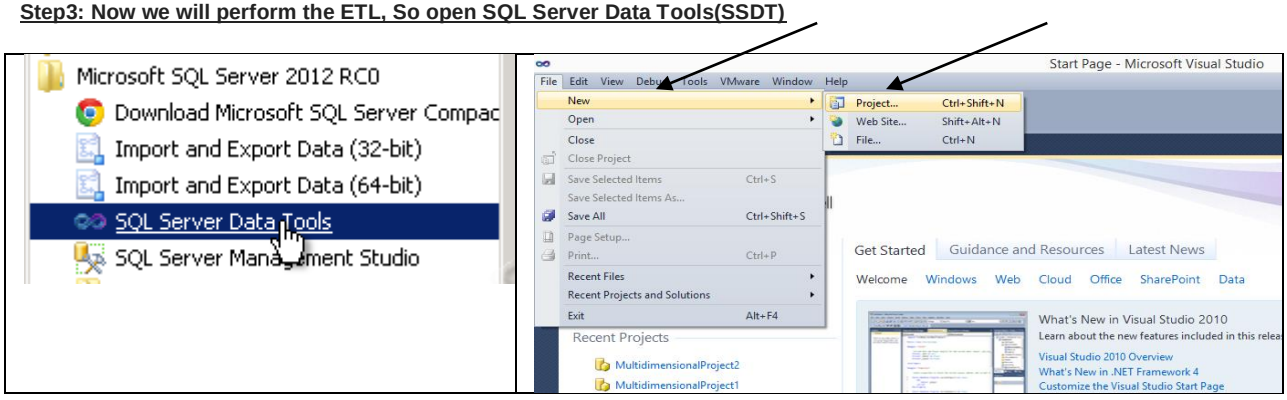


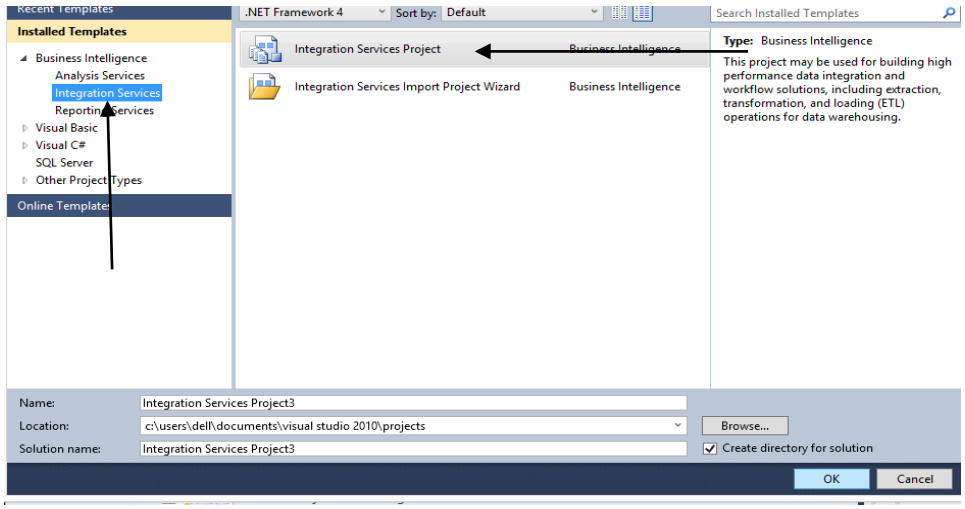


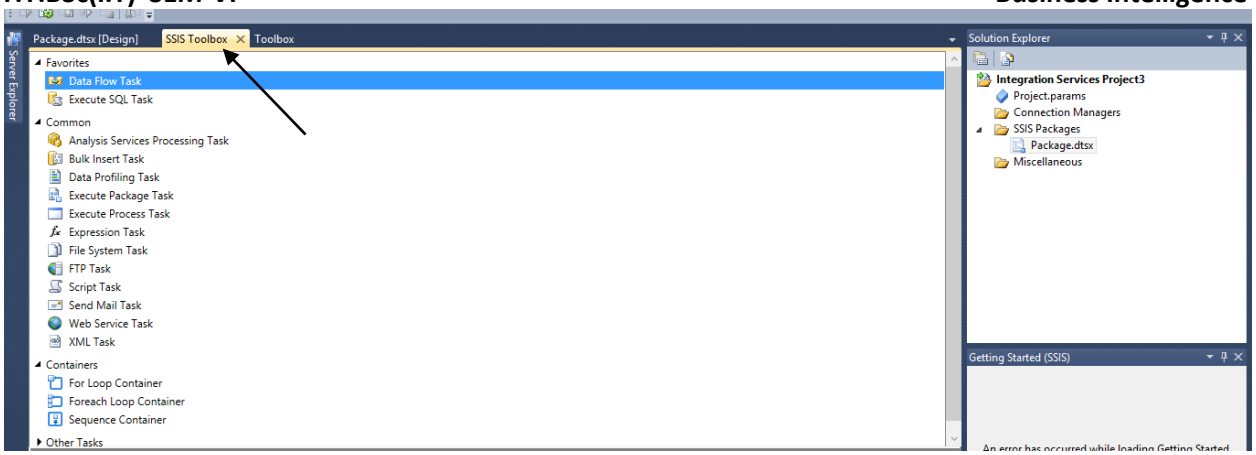
Press Control + S and Save the table with name Table_1

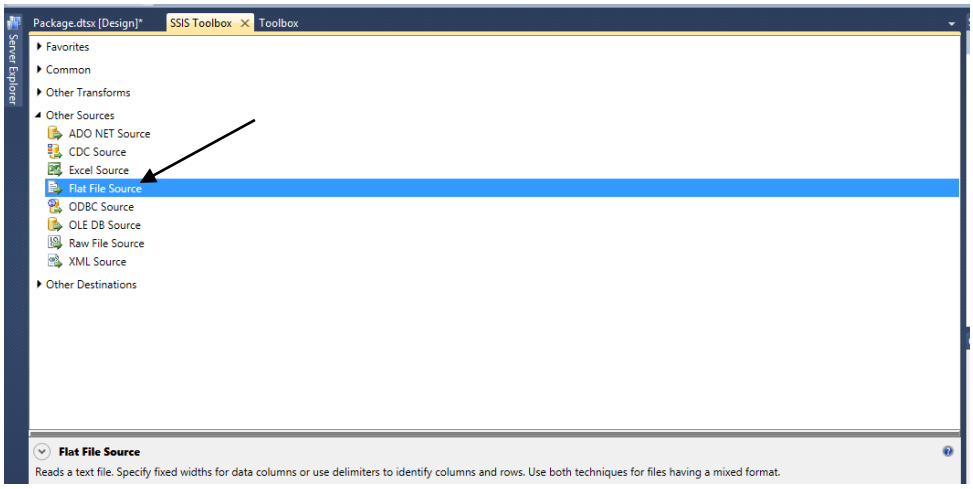


Step3: Now we will perform the ETL, So open SQL Server Data Tools(SSDT)

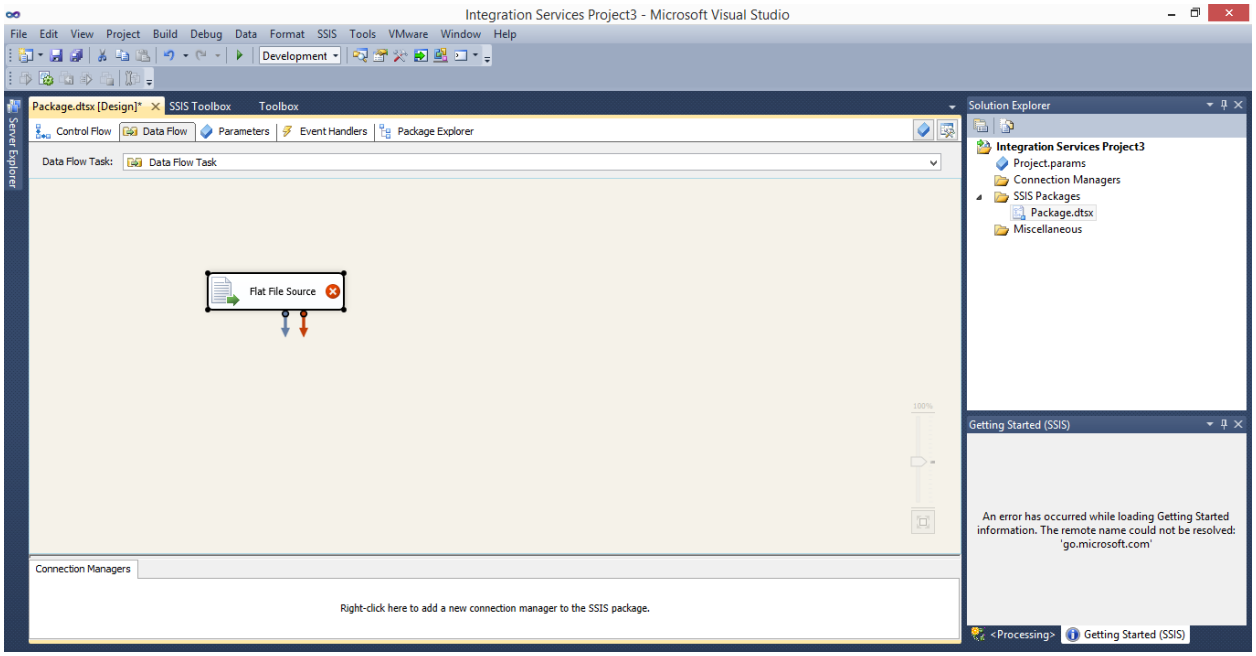




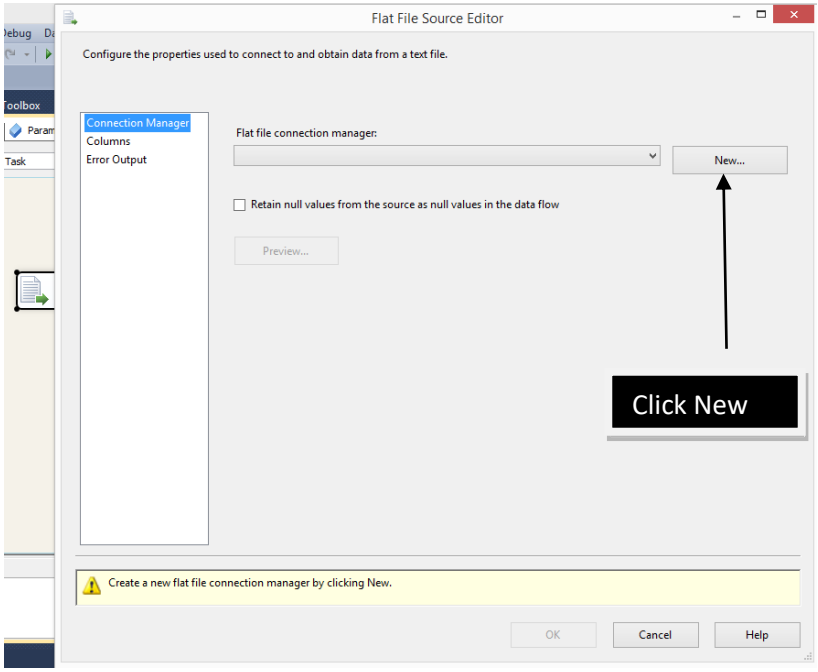


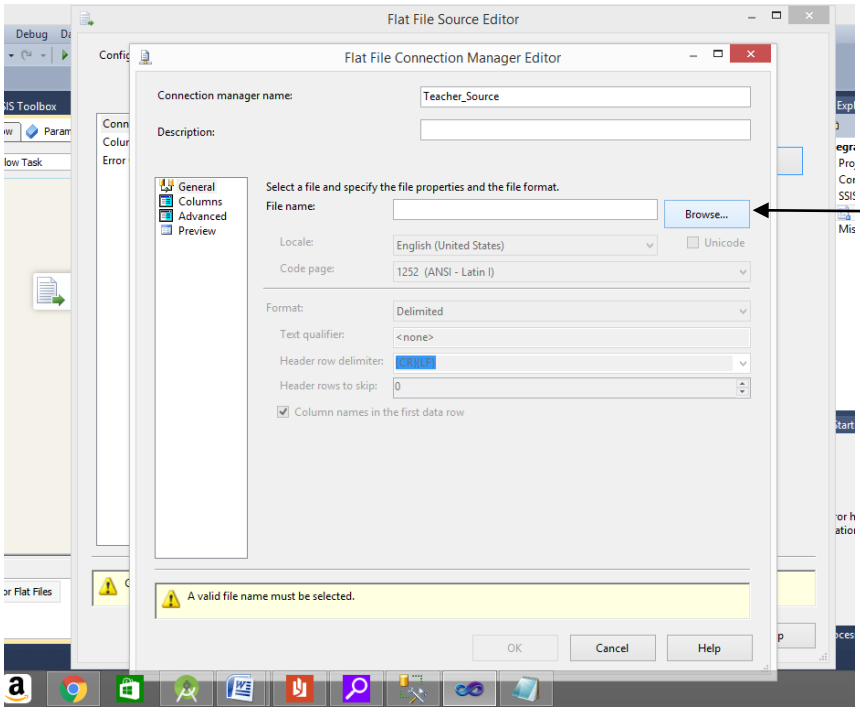


Drag and drop the Flat File Source from SSDT Tool Box.

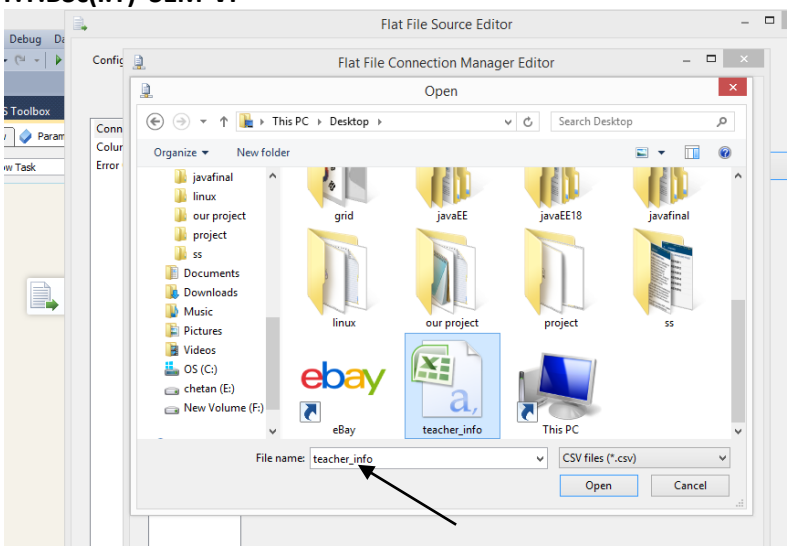


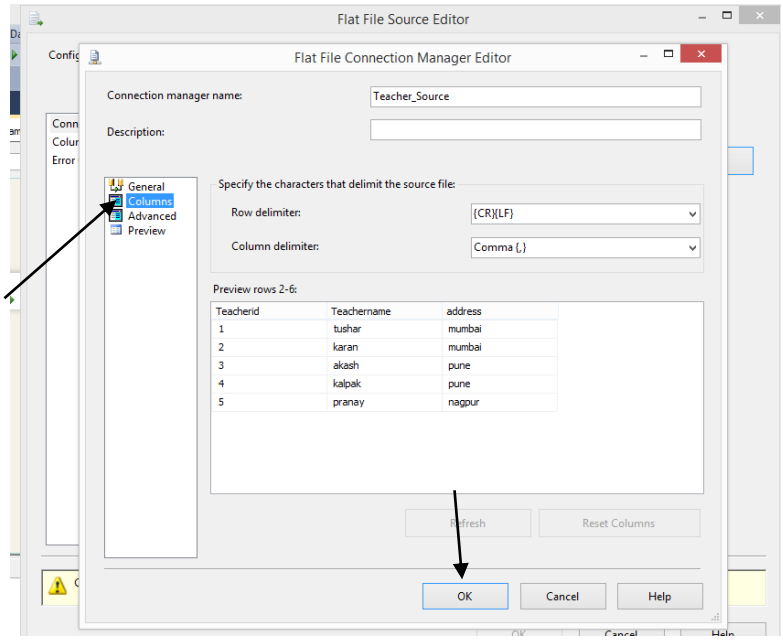
Double Click on Flat File Source

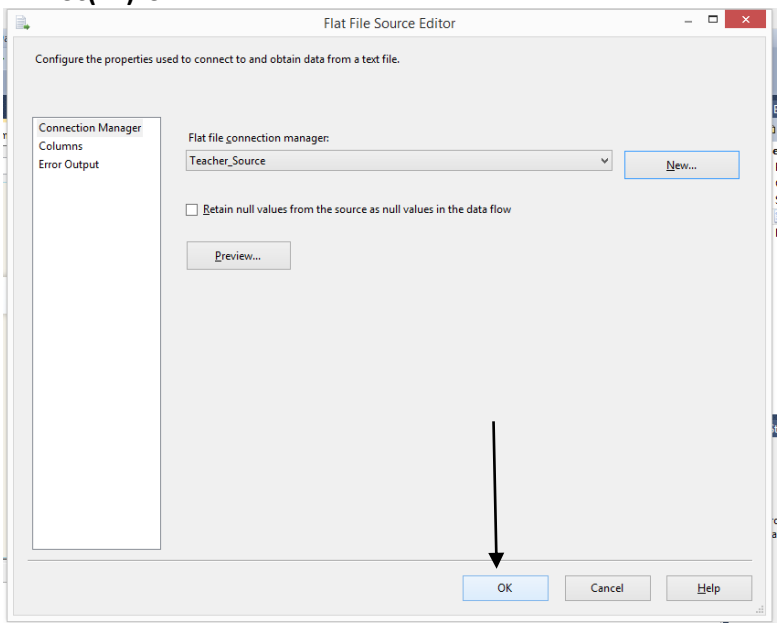




Click Browse and Select the teacher.csv file

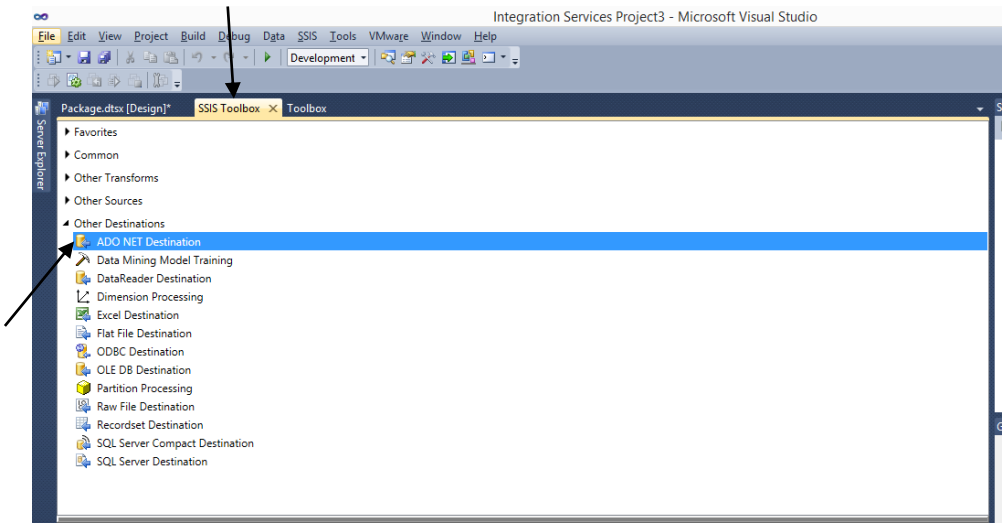

Flat File Source Editor
Flat File Connection Manager Editor
Open
This PC ▸ Desktop ▸
Search Desktop
Organize
New folder
javafinal
linux
our project
project
ss
Documents
Downloads
Music
Pictures
Videos
OS (C:)
chetan (E:)
New Volume (F:)
grid
javaEE
javaEE18
javafinal
linux
our project
project
ss
eBay
teacher_info
This PC
File name: teacher_info
CSV files (*.csv)
Open
Cancel

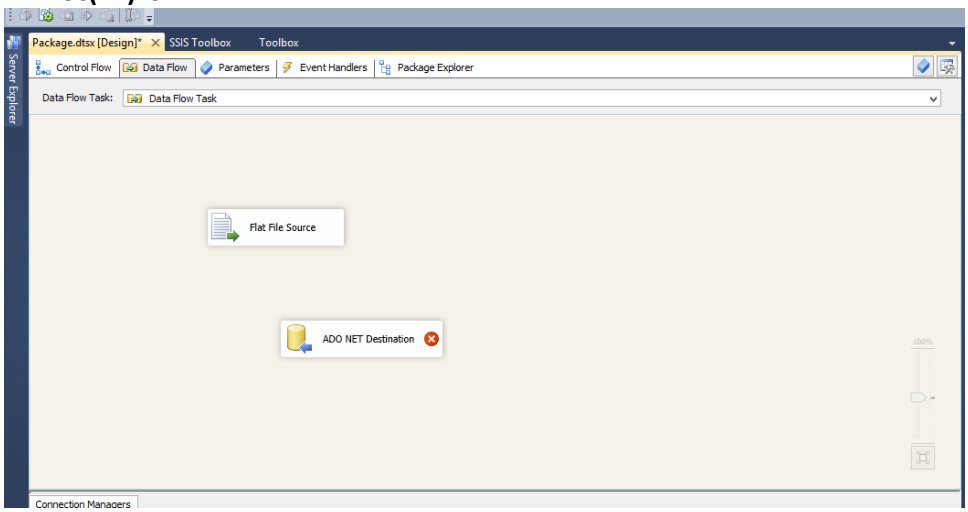

Flat File Source Editor
Flat File Connection Manager Editor
Connection manager name:
Teacher_Source
Description:
General
Columns
Advanced
Preview
Specify the characters that delimit the source file:
Row delimiter:
{CR}{LF}
Column delimiter:
Comma {,}
Preview rows 2-6:
Teacherid | Teachername | address
1 | tushar | mumbai
2 | karan | mumbai
3 | akash | pune
4 | kalpak | pune
5 | pranay | nagpur
Refresh
Reset Columns
OK
Cancel
Help



We will be done with ETL Source.

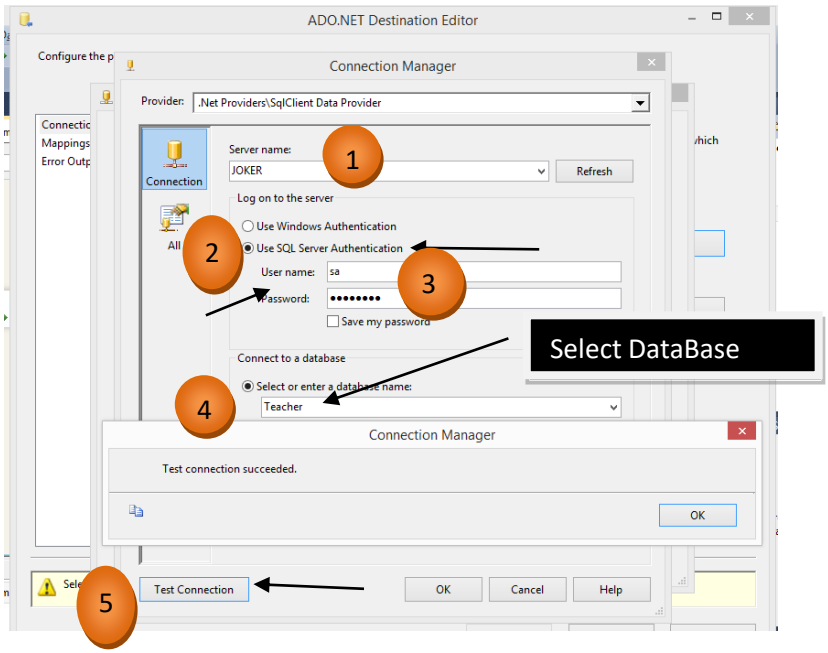
Now we will define the ETL target, select ADO.NET Destination from SSDT toolbox.



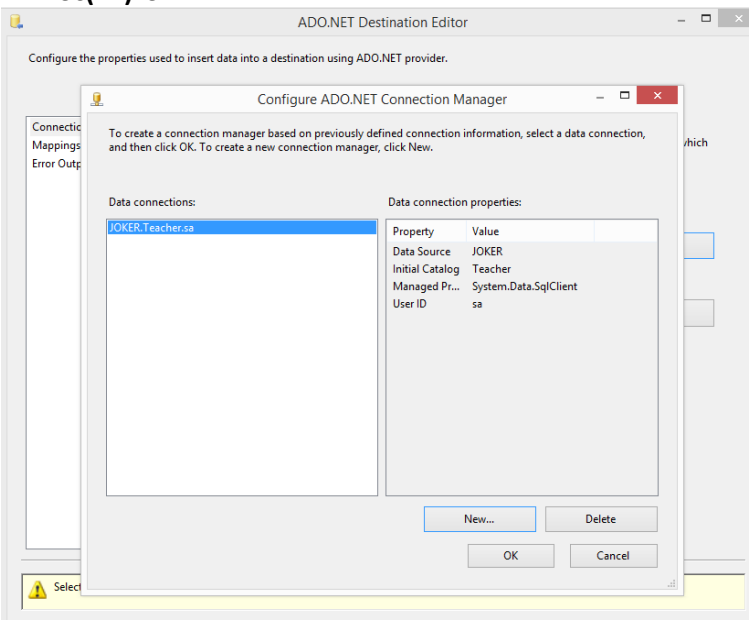


Double Click on ADO.NET Destination control

Enter The SQL Server instance name = JOKER in this case

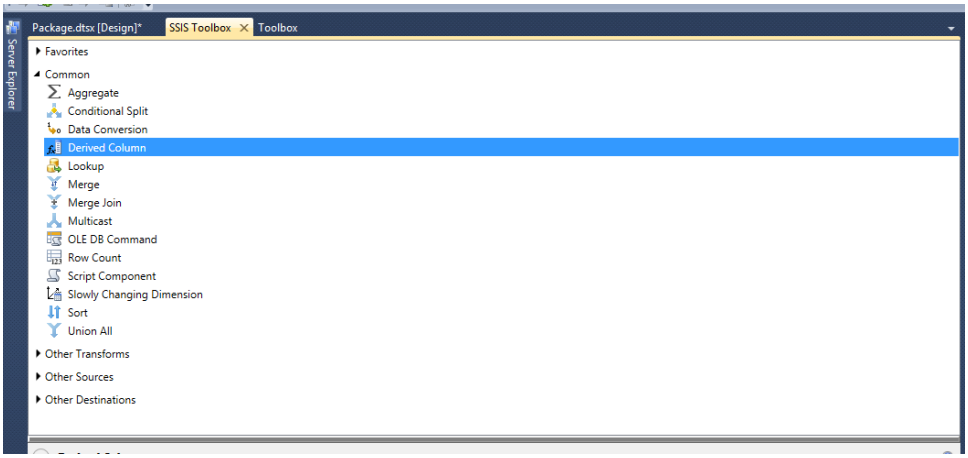


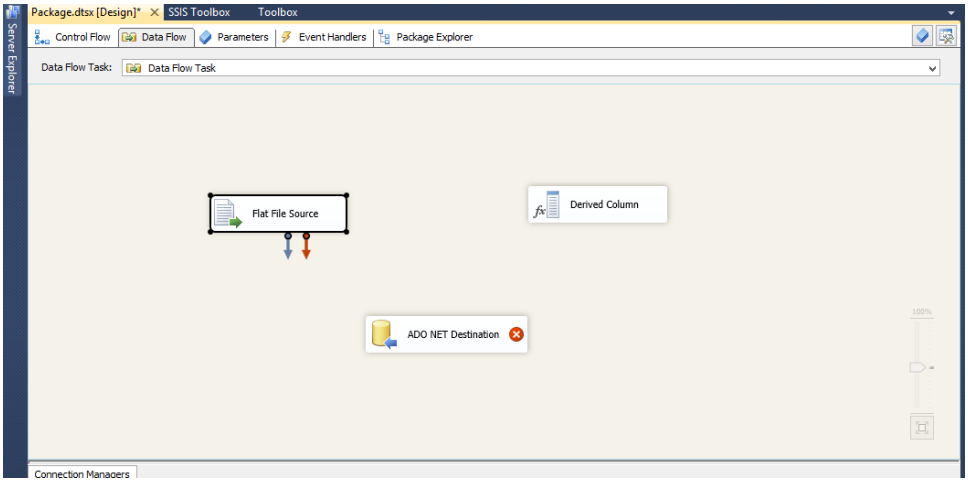
Click Ok



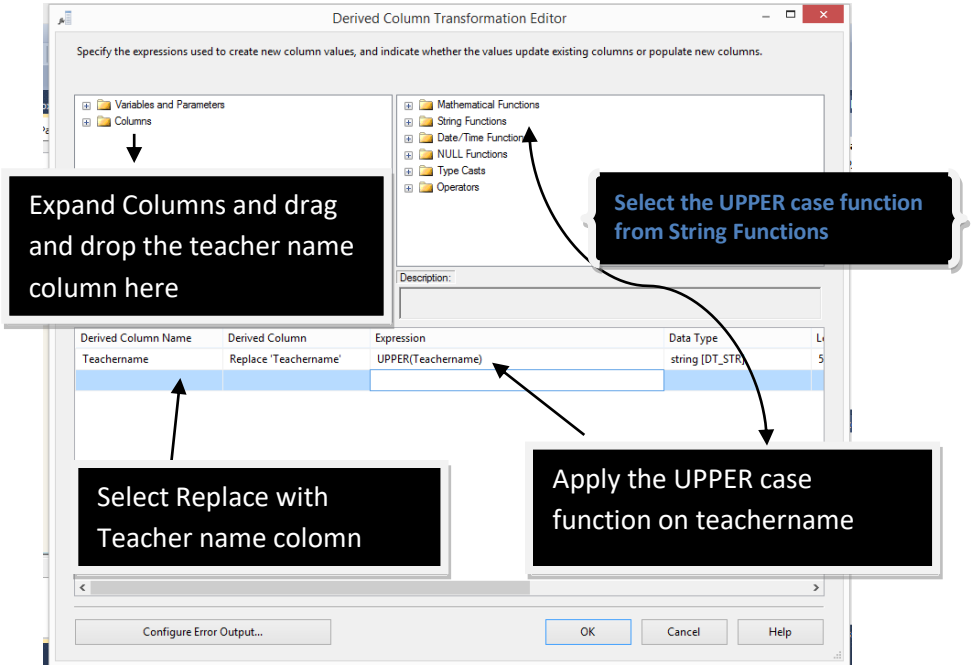
Click Ok

Step 3: Now we will define Transformation, for this drag and drop Derived Column from SSDT Toolbox

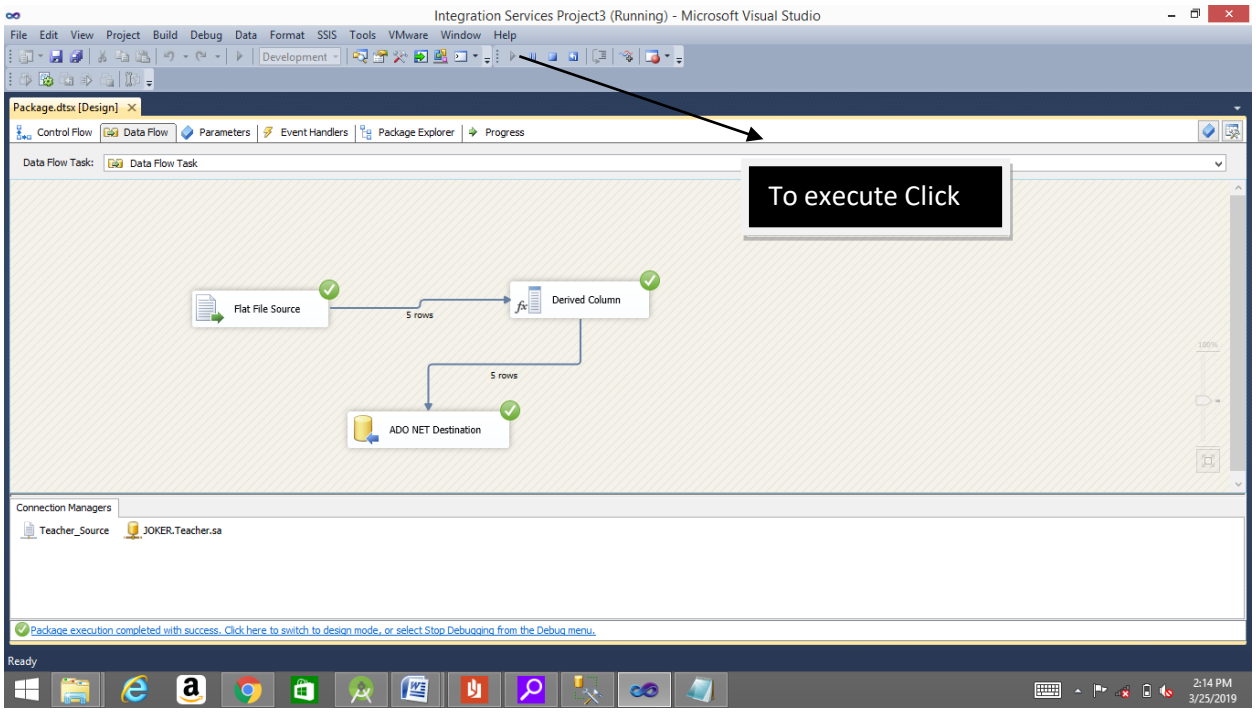




Double Click on Derived Column Control.



Connect the Blue arrows from left to right and execute the project.



To see the output goto SQL Server Management Studio and Check the Table_1