SQL Server Express 2017 Installation Guide

By Engin Calisir,

06/22/2018 V1.0
06/04/2019 Updated with Azure Migration

Table of Contents

Generally …

This guide prepared for ITSS/MIS classes' .All this steps should be fallow exactly.
If you do not get any problem during to installation you should be finish all tasks less than 30 minutes or less.
This installation only for Windows 8.0 or higher OS, if you are still using Windows XP or Windows7 unfortunately you need to upgrade your OS first and come back to this step.

SQL Server Express has limitations on database size, computing capacity, and available features, the core SQL engine is the same as with other SQL Server versions, and it provides for an easier install and a lighter load on your computer.

SQL Overview

SQL server is one of the larger utilized well know relational database developed by Microsoft and runs on Windows platform recently they are working on Linux platforms as well. There are several version of SQL available for different use case.

SQL server and its components are not our scope and will not teach in classroom however if you are interesting about more details here is the good documentation link to start; https://docs.microsoft.com/en-us/sql/sql-server/sql-server-technical-documentation?view=sql-server-2017

Hardware and Software Requirements

o SQL Server Standard Edition Requirements
o Installations on Windows require at least 4GB of RAM, but preferably 8 GB and x64 processor only and 6 GB disk Space ;
o SQL Server Express edition Requirements
o Installations on Windows require at least 512MB of RAM, but preferably 1GB and x64 processor only and 2 GB disk Space.

o for more details ; https://docs.microsoft.com/en-us/sql/sql-server/install/hardware-and-software-requirements-for-installing-sql-server?view=sql-server-2017

Other SQL Editions
This guide covers installation of the Express, which is suitable for most classes. Other versions of SQL such as Standard ,Enterprise and Web editions also available on Microsoft Image for your collection .
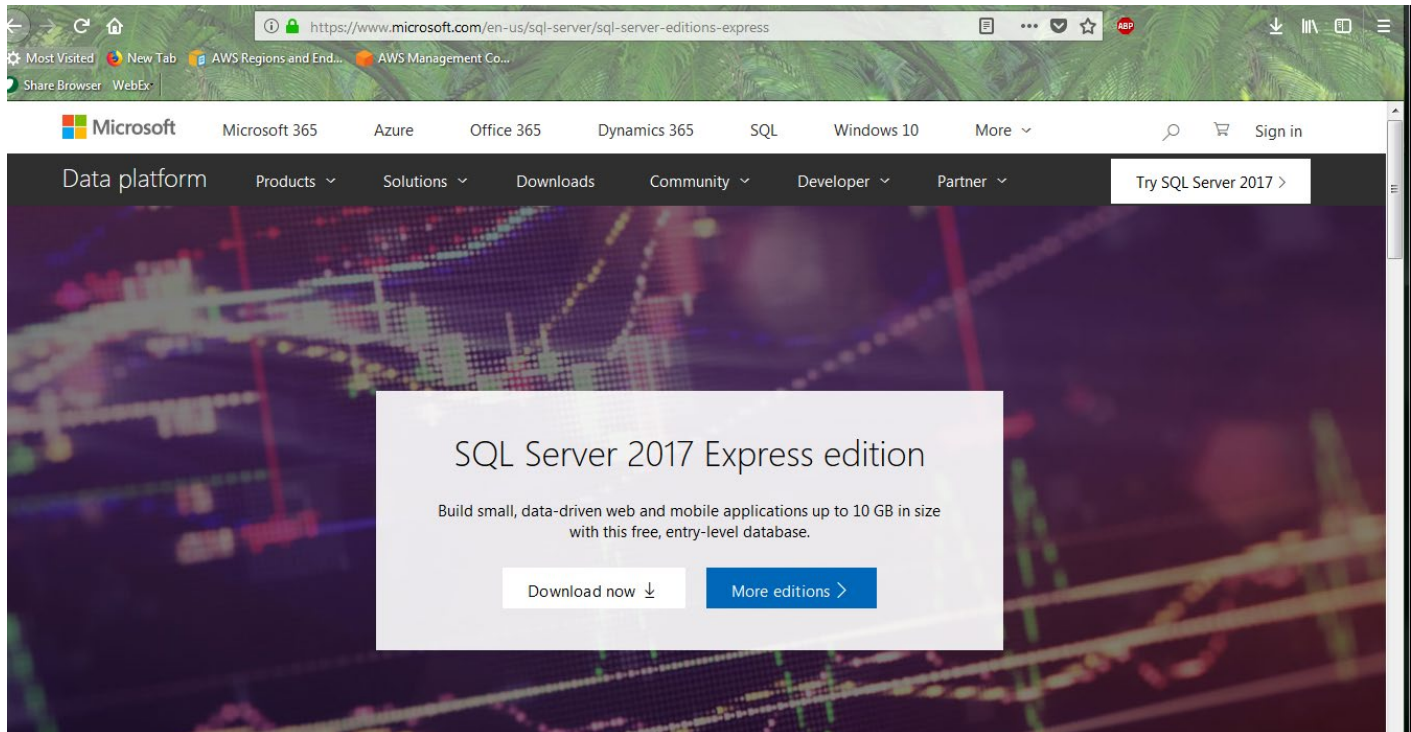
PART I

Downloading SQL Server 2017 Express Edition
This section guides you through downloading SQL Server Express from Microsoft's website.
**Step 1: Accessing the URL**
Browse to address https://www.microsoft.com/en-us/sql-server/sql-server-editions-express
(or just search for "SQL Server Express 2017")
You should see screen similar to the following:

Step 2: Downloading the Installer
Click on the "Download" button, and you will see a screen similar to the following: During to preparation of this documentation SQL server 2017 Express edition was available.
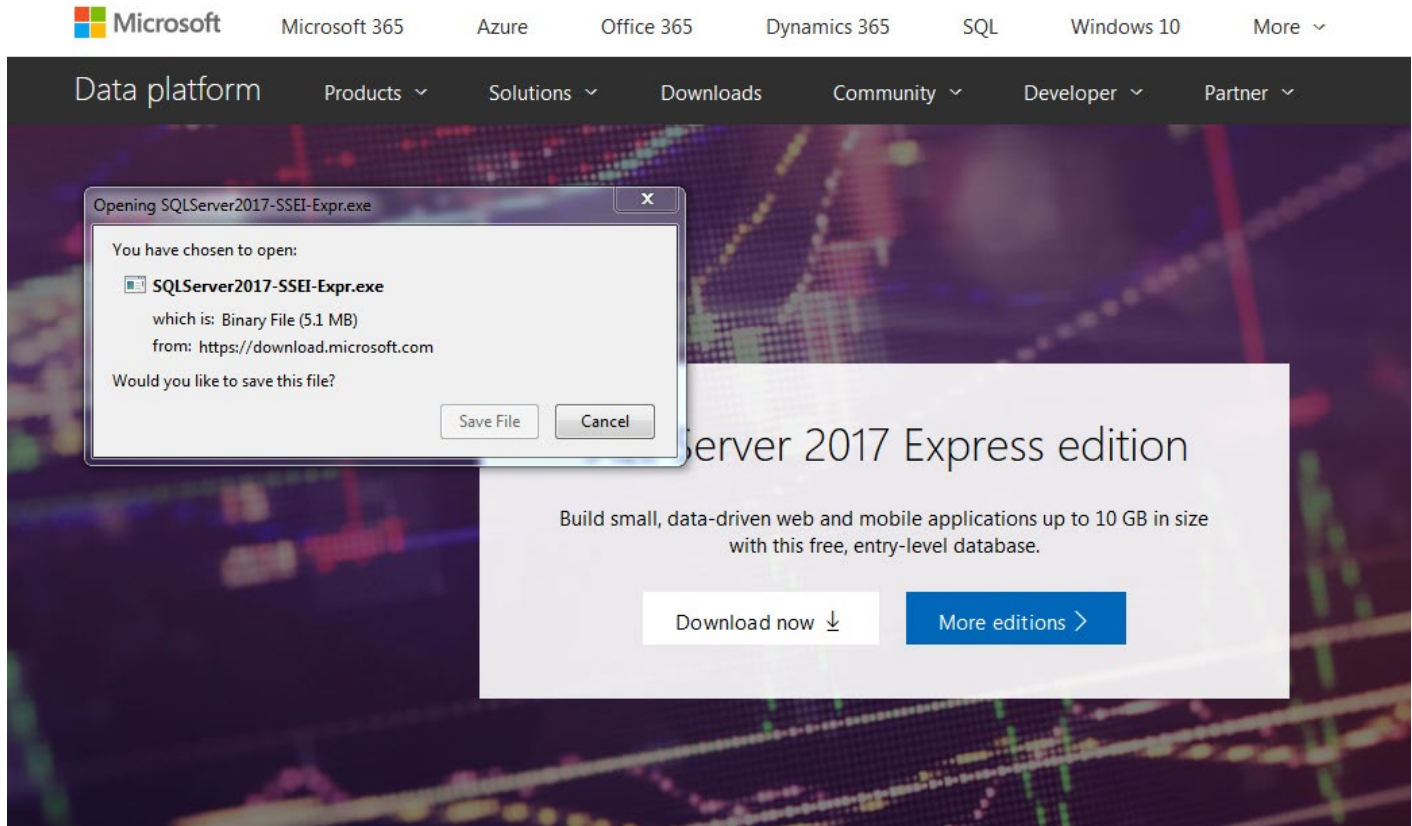

After the "Download Now" button pressed then the download file dialog should appear automatically. You can save the file any location, please do not forget location of file what you just saved for next step installation

Installing SQL Server 2017 Express Edition

Now that you've downloaded the installer, you'll need to execute it and follow the on-screen prompts to install SQL Server.

Step 3: Starting the Installer

I hope you remember location of the downloaded file ,many web browsers give the option of executing a recently downloaded file directly from the browser. If your browser gives you that option, that will likely be the quickest and easiest. For example, Google Chrome gives the option as illustrated below, and all that's needed is to click on the filename.
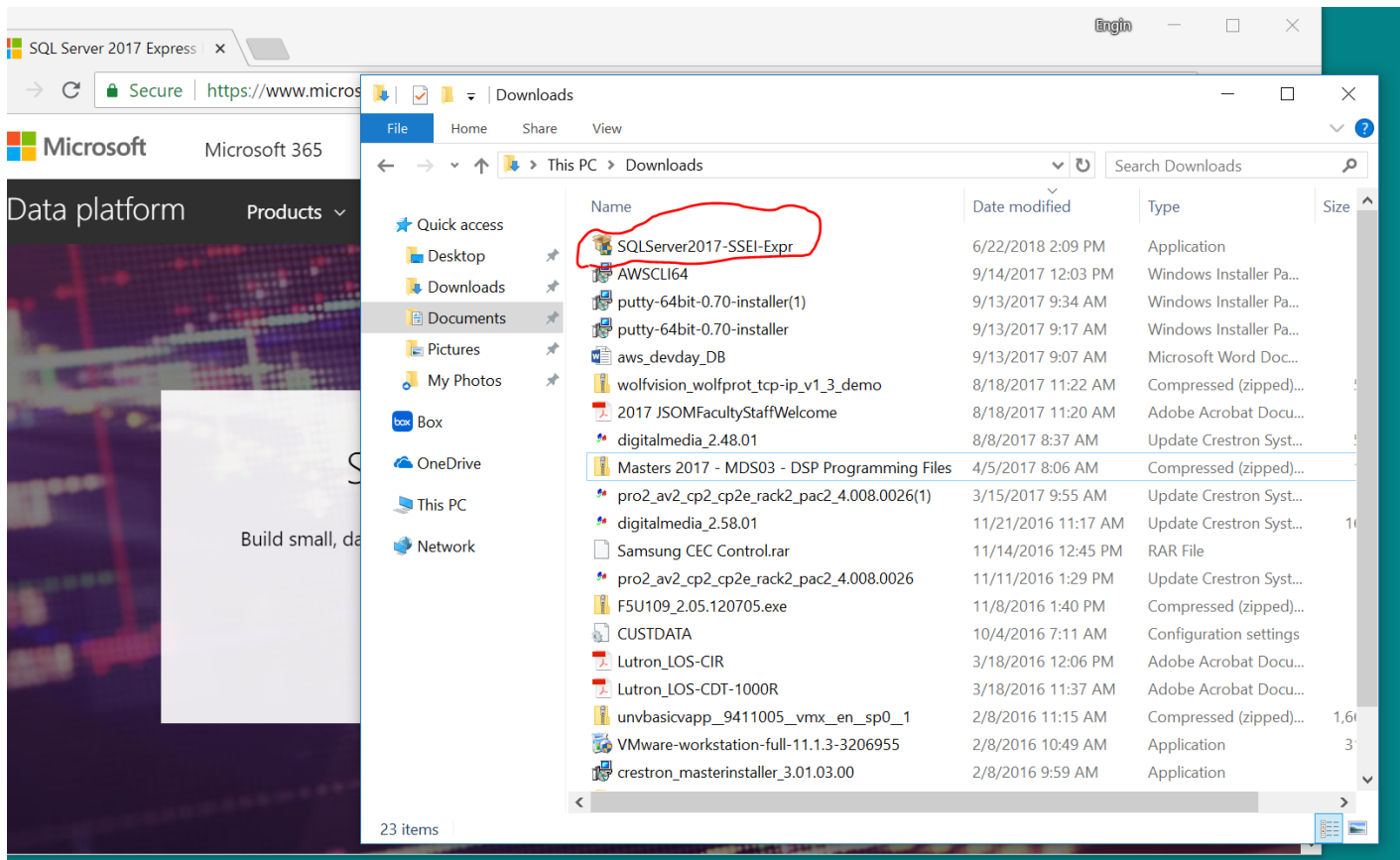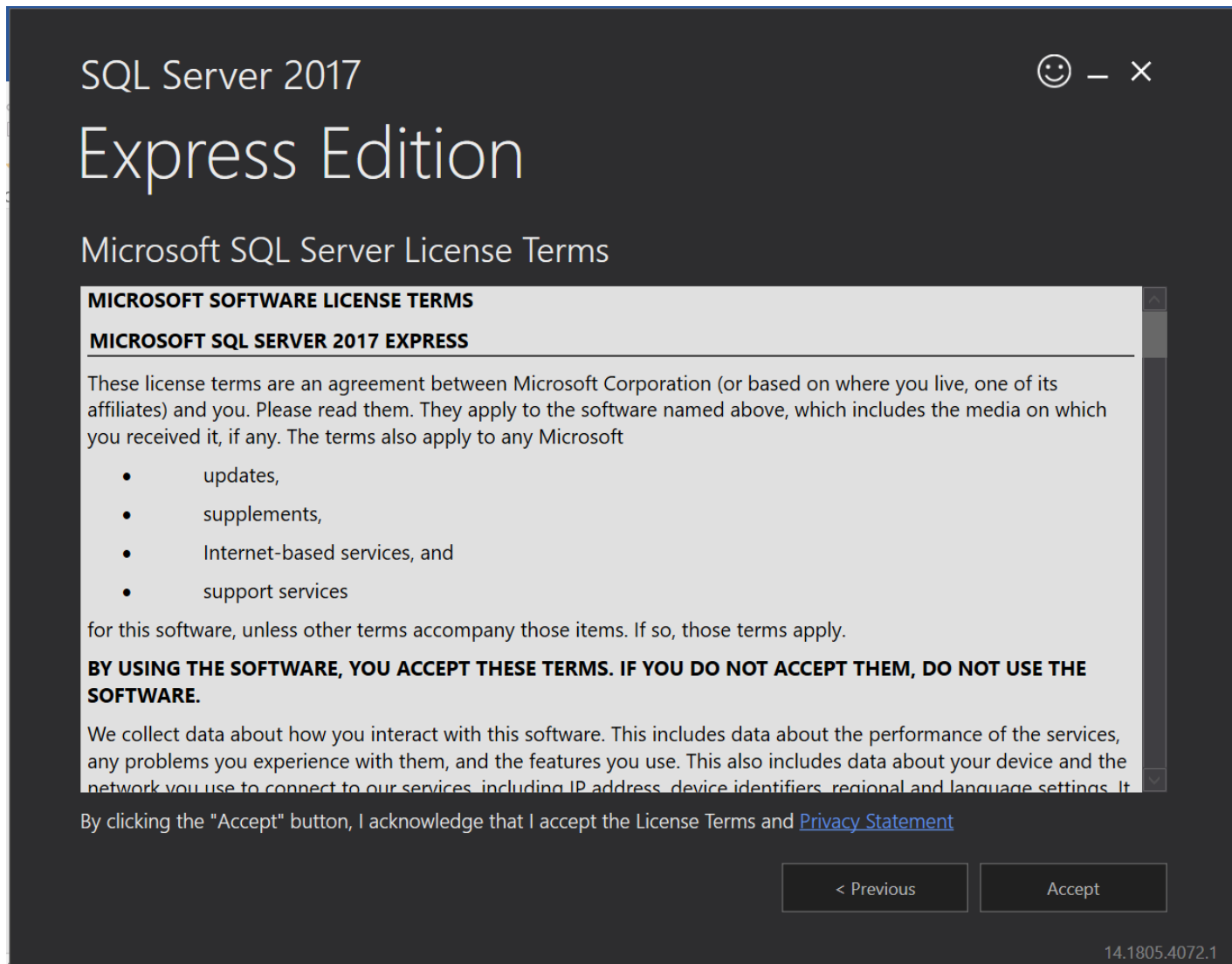
Step 4: Progressing Through the Installation Wizard

Right click to file and select run as a administrator option , the installer will display an installation wizard as something similar to the following:

Select "Basic" to install the default version of SQL Server. Next, accept the license terms.

The wizard will present a choice of install locations as shown in the following screenshot.

SQL Server 2017

Express Edition

Specify SQL Server install location

INSTALL LOCATION

C:\Program Files\Microsoft SQL Server   Browse

MINIMUM FREE SPACE
6616 MB

DOWNLOAD SIZE
283 MB

Close   < Previous   Install

14.1805.4072.1
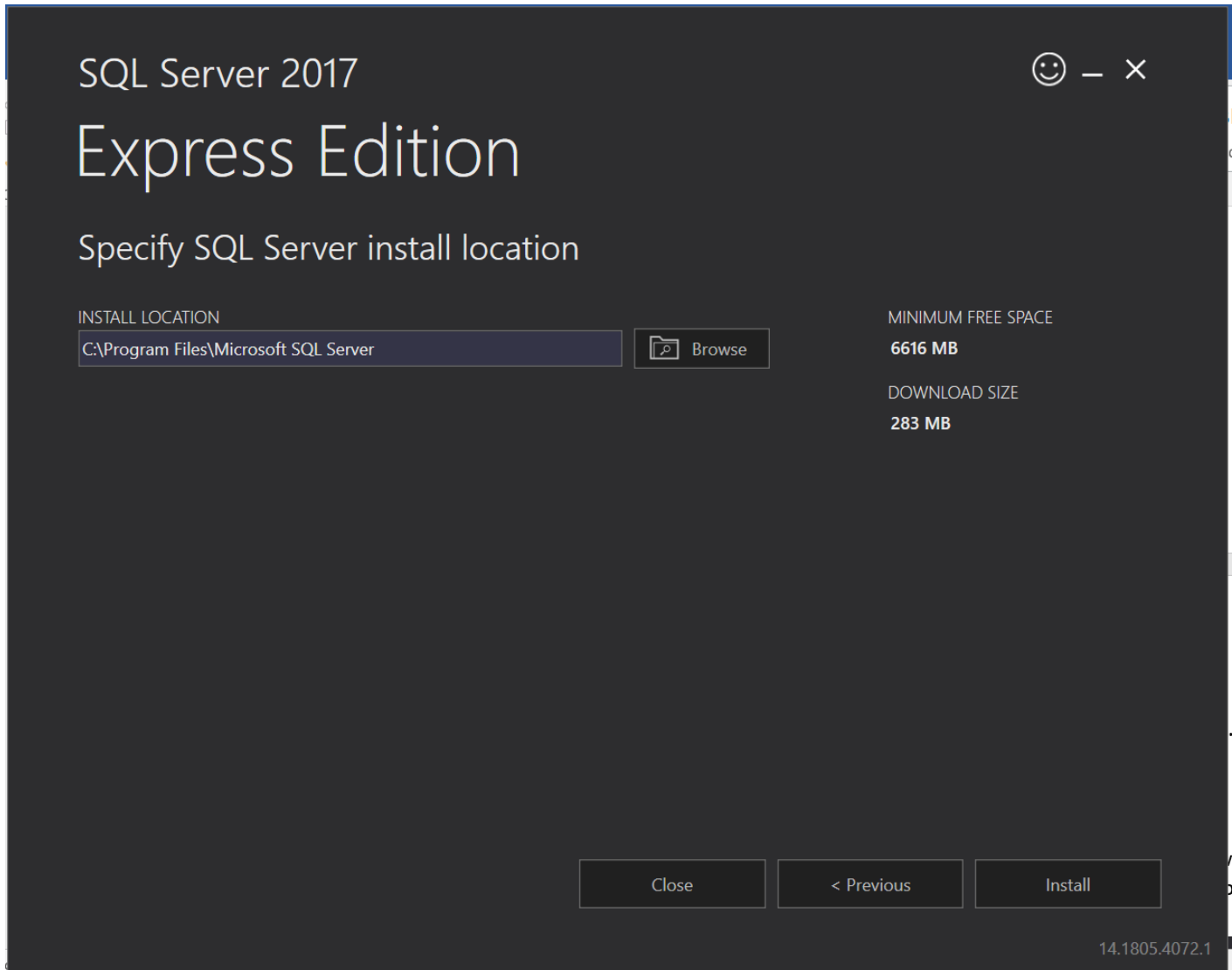
 The default location is just fine, if you want to install different location please note the location of file for future steps or just click the "Install" button.

The installation process will appear right after the selection. You will see a progress window similar the following until the installation is complete.
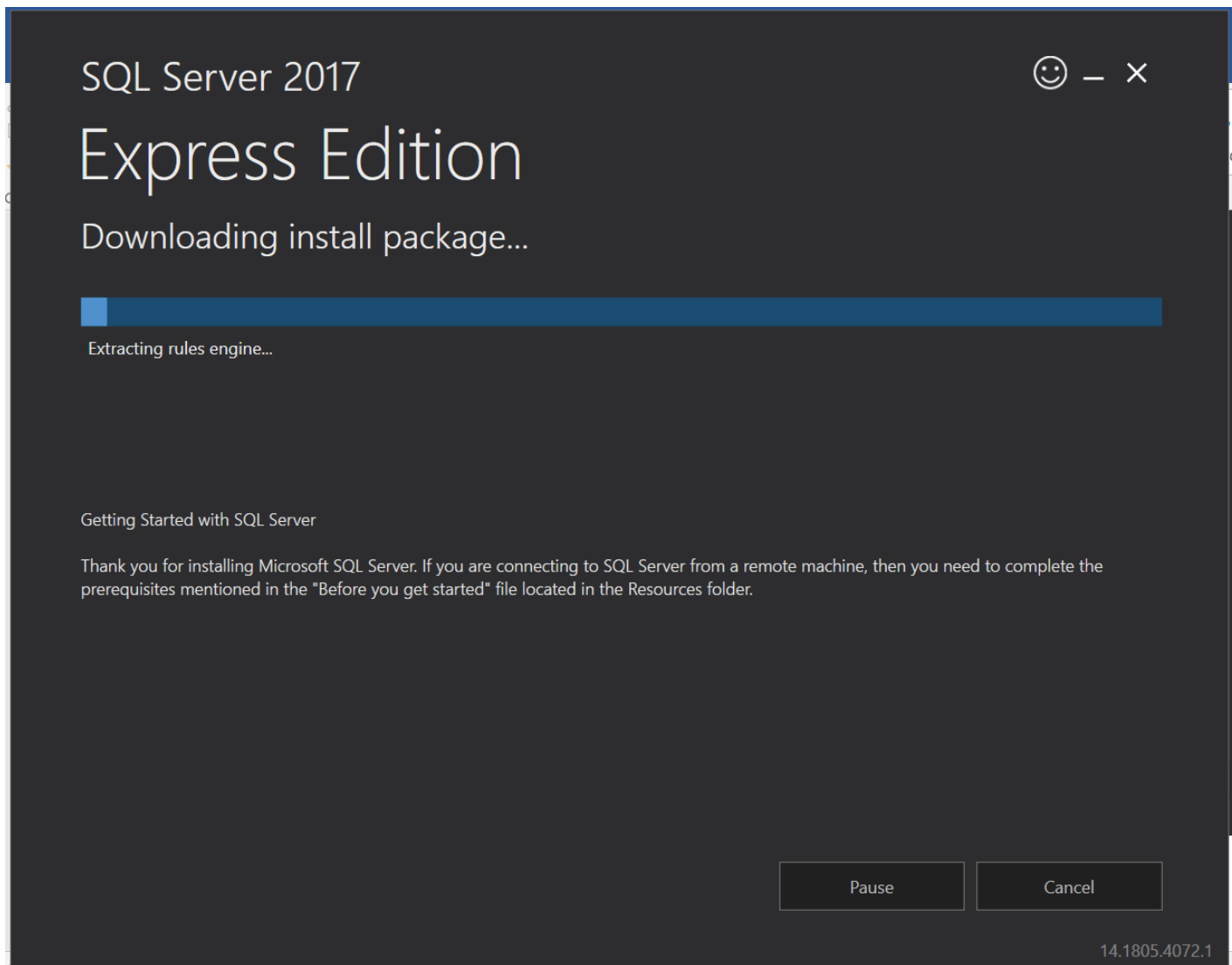
When the installation is complete, you will see a window similar to the following.
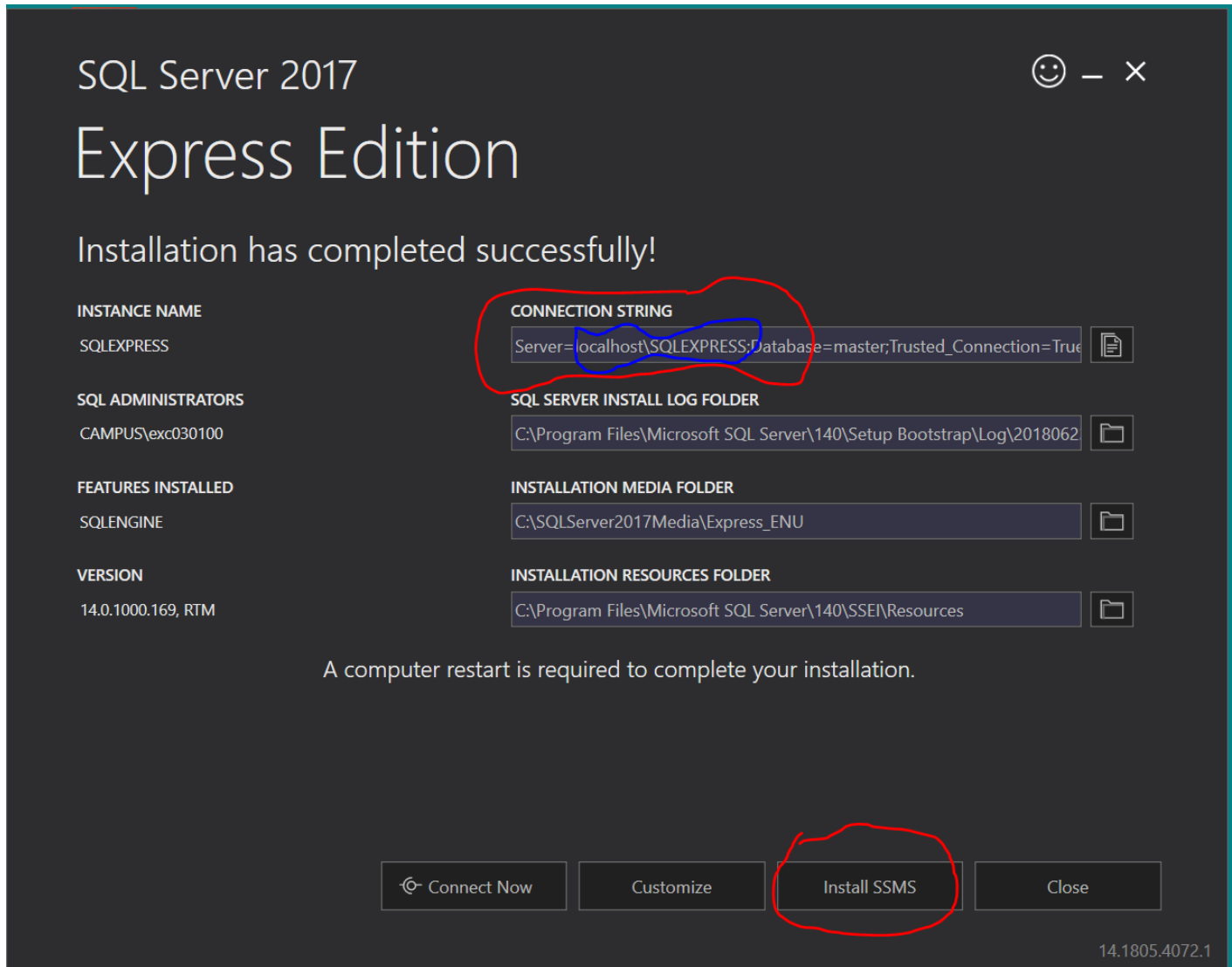
You have successfully installed SQL Server Express at this point but **you are not done yet please do not close the window!** You'll still need the window to install SQL Server Management Studio. After the Installation of SSMS you can came get back to this screen and close it safely.

PART II
Installing SQL Server Management Studio (SSMS)

SQL Server developed in client-server architecture such as database itself is the server and interaction with the data and the capability to add, modify, delete, and access the data is required client functions.

Microsoft provides SQL Server Management Studio (SSMS) for client's management tools which you will install in this section. SSMS is very capable and provides many powerful conveniences and capabilities.

Step 1: Downloading SSMS

From previus installation (step 4), click the "Install tools" button. Doing so will open a download page in your web browser for SSMS, similar to the below or you can google SSMS usually first Microsoft link is the correct link whoever I also provided link for you for just in case you already close the installation

https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-2017

Click the "Download SQL Server Management Studio..." link to download its installer, and save

the file to a location you can remember again.
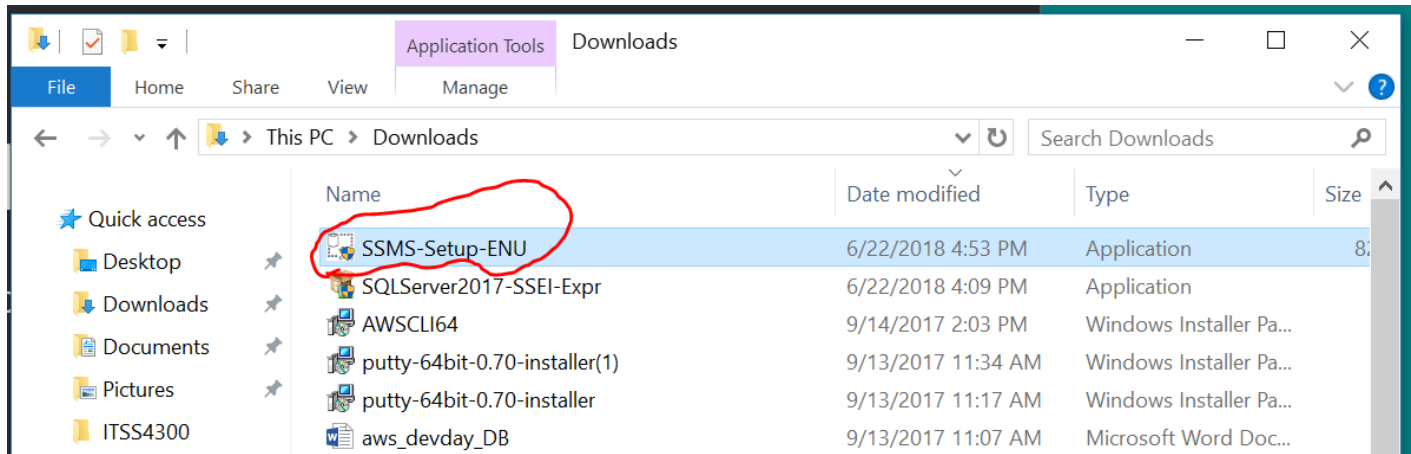
Step 2: Completing the SSMS Install

Once downloaded, run the SSMS installer from your browser, or directly by double clicking it in Windows Explorer. The first screen that appear is shown below. I tis very straight forward installation and doesn't required any additional feedback from you.

Click the "Install" button to begin. A progress screen will appear similar to the following.

RELEASE 17.8

Microsoft SQL Server Management Studio

Welcome. Click "Install" to begin.

By clicking the "Install" button, I acknowledge that I accept the License Terms and Privacy Statement.

SQL Server Management Studio transmits information about your installation experience, as well as other usage and performance data, to Microsoft to help improve the product. To learn more about data processing and privacy controls, and to turn off the collection of this information after installation, see the documentation.

Install   Close

Let it progress through until completion, then you will see a screen indicating successful setup, similar to the below.
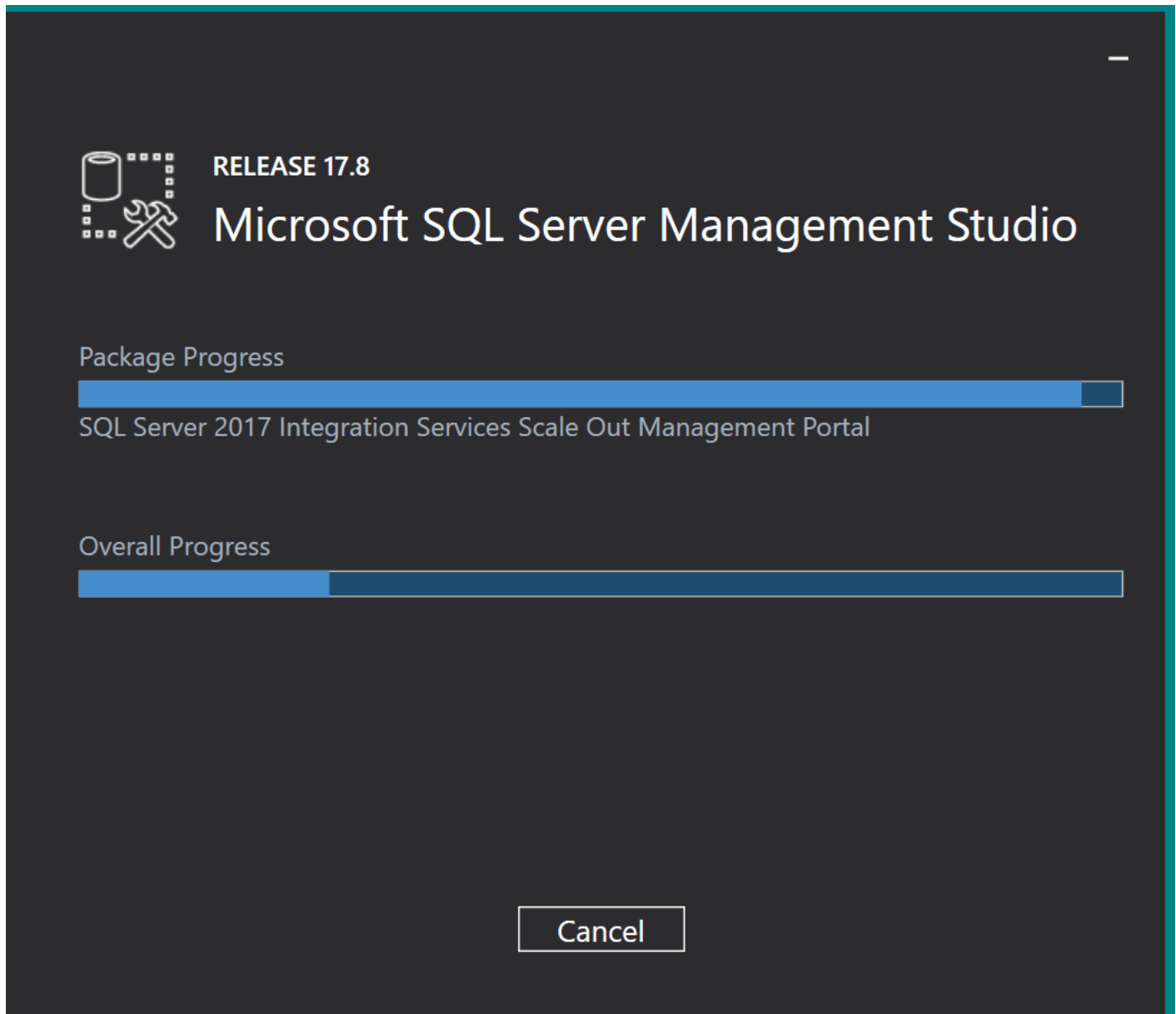
RELEASE 17.8

Microsoft SQL Server Management Studio

Setup Completed

All specified components have been installed successfully.

Close

Congratulations! SSMS is now installed. You may now close this window, as well as the SQL Server Express installation Window from Part I ,Step 4.

Using your Database to Complete Assignments

You have installed both SQL Server and SSMS. There are just a few more steps you need in order to start using your database to complete assignments -- connecting to your database and creating a database for assignments.

Step 7: Connecting to your Database

To do anything at all with your database, you must first connect to it. SSMS is accessible under All apps/Microsoft SQL Server 2017/Microsoft SQL Server Management Studio, as illustrated in the screenshot below.
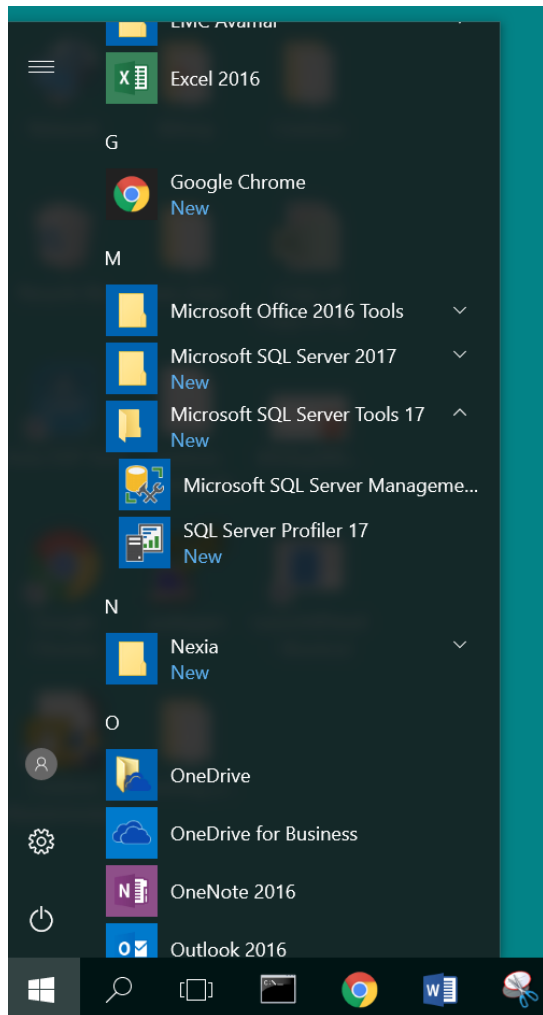
Click on the icon to run SSMS. When SSMS first runs, it will ask you for the server name, as illustrated below.
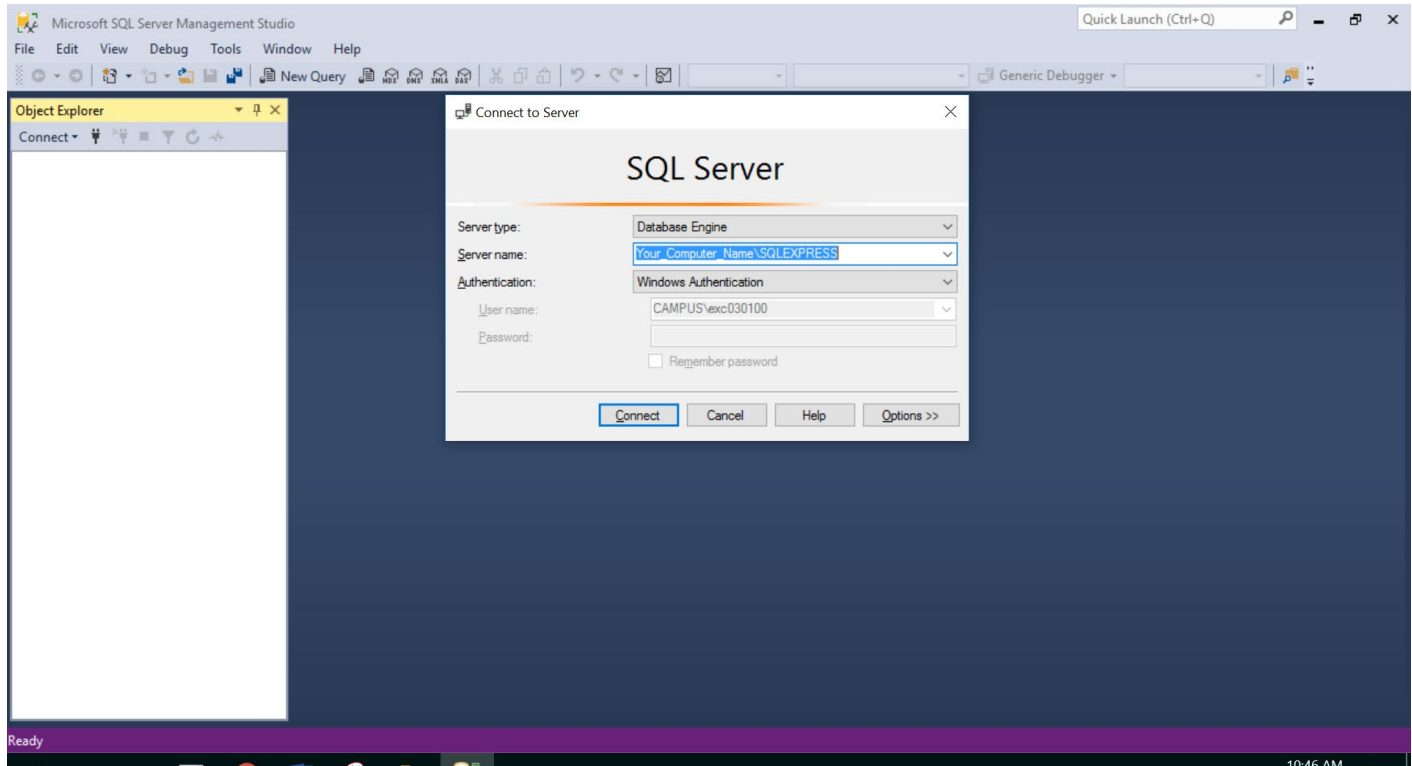
Under "Local Servers", expand "Database Engine" and select the SQL Server instance you just installed. It will be of the form **YourMachineName\SQLEXPRESS**, as illustrated below.

Click the "OK" button to fill in the server name, then click the "Connect" button to connect. After doing so, you will see a connection to your database on the left-hand side, under "Object Explorer", similar to the below screenshot.

You have just connected to your database through SQL Server Management Studio!

PART III

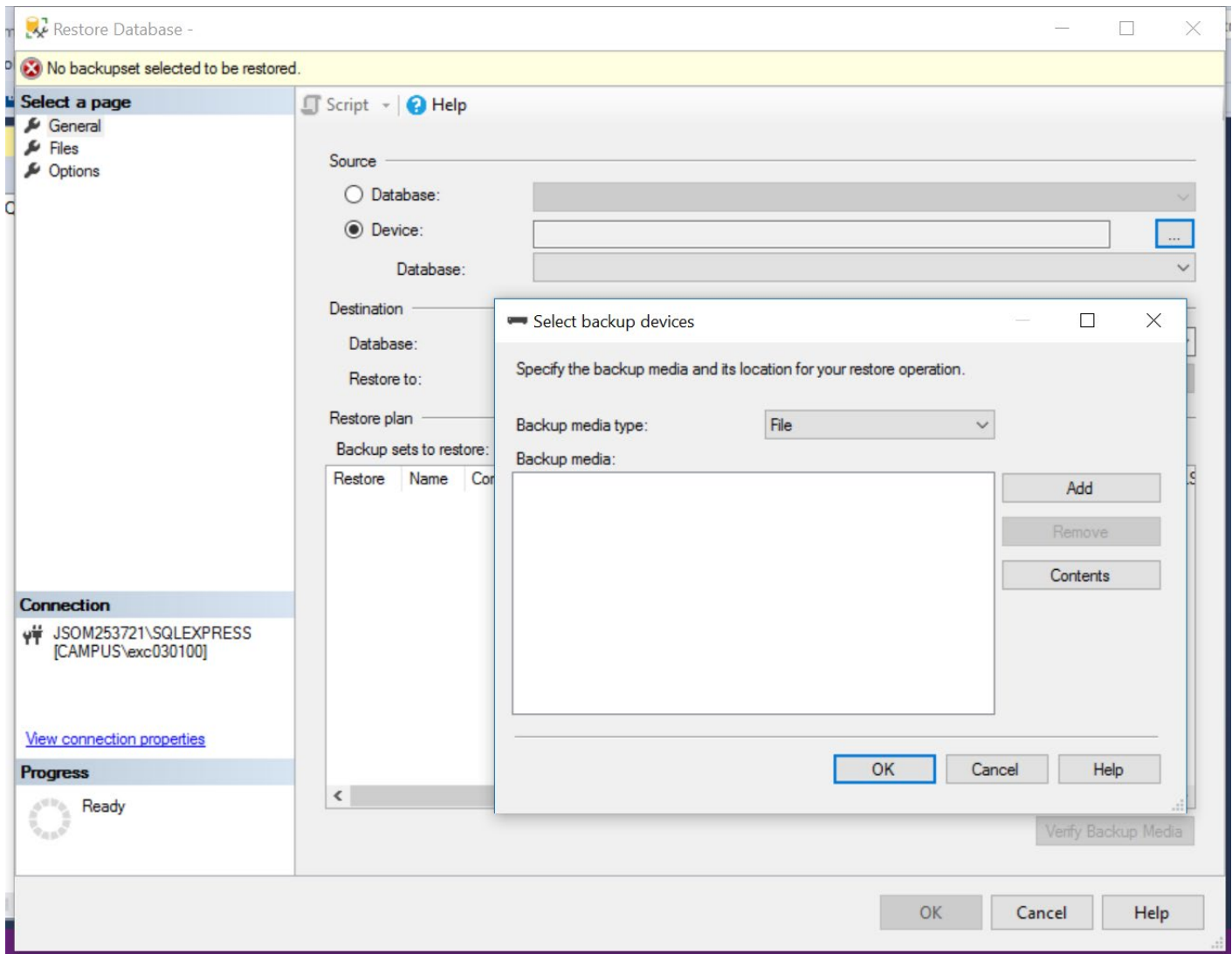**Restoring Practice SQL Database**

During to class lab time we are going to use practice database. Microsoft provides very useful database called "AdventureWorks2012" this database available in lab computers also.
Please download this database from my web page to make sure all student uses same data set.
Original web site has different versions and students get very confuse.

Go to Faculty web page (http://jindal.utdallas.edu/~ecalisir) and
1. Download "AdventureWork2012.bak" file into your own computer under the below folder ;
2. C:\Program Files\Microsoft SQL Server\MSSQL14.SQLEXPRESS\MSSQL\Backup
3. And run SSMS
4. Login into SMMS
5. Go to database line left side of the screen under the object explorer and right click the database and select "Restore Database"
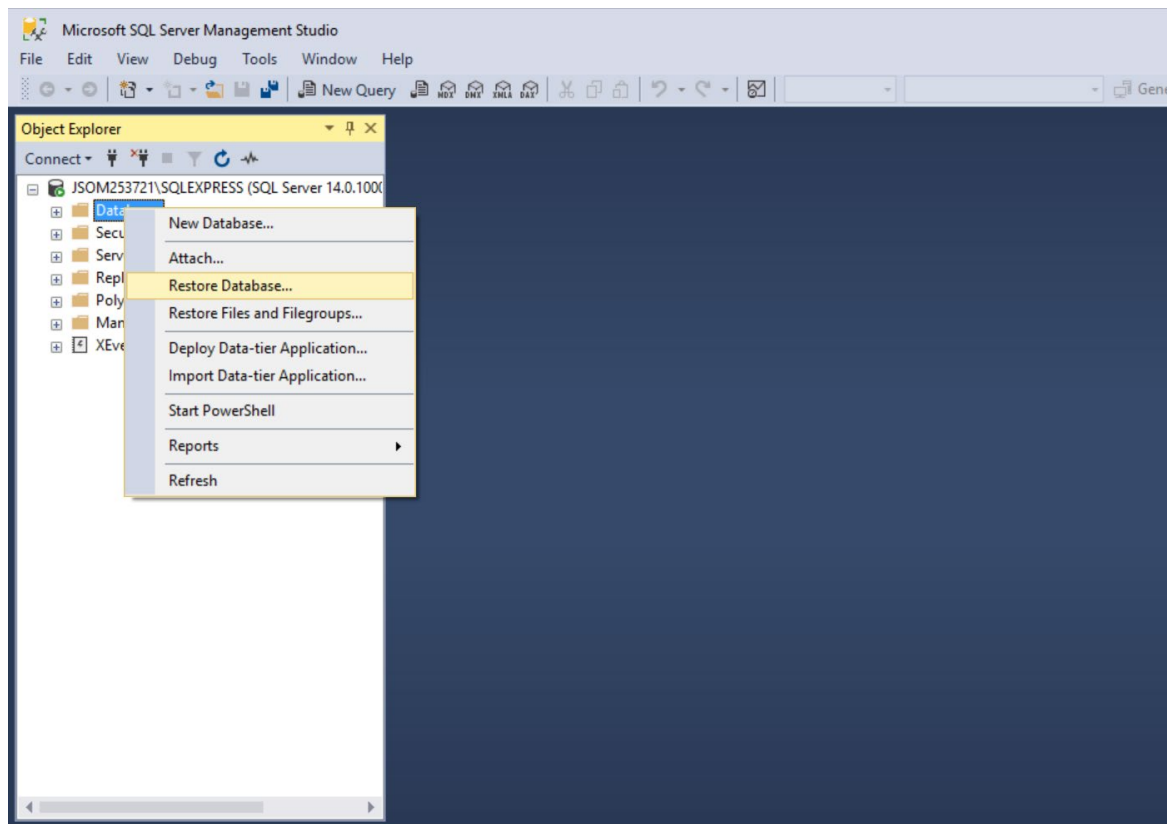
 6.New Restore Database window will be appear ; from new window select Device Radio button and click blue square box on the right hand side as soon as when you click the square box another "select backup devices " window will show up for file location.

Restore Database -

❌ No backupset selected to be restored.

Select a page
- 🔧 General
- 🔧 Files
- 🔧 Options

🔲 Script ⏷ | ❓ Help

Source

○ Database: [_____] ⏷

● Device: [_____] [...]

Database: [_____] ⏷

Destination

Database:

Restore to:

Restore plan

Backup sets to restore:

Restore	Name	Co...

Connection

🔧 JSOM253721\SQLEXPRESS
[CAMPUS\exc030100]

[View connection properties](#)

Progress

⟳ Ready

Select backup devices — ☐ ✕

Specify the backup media and its location for your restore operation.

Backup media type: [File ⏷]

Backup media:

[_____]   [Add]
[_____]   [Remove]
[_____]   [Contents]

[OK]   [Cancel]   [Help]

Verify Backup Media

[OK]   [Cancel]   [Help]

7.From new "select backup device" window, select "add " option and file should be in there if you copied file in correct directory. From right section select "AdventureWorks2102.bak" file press OK
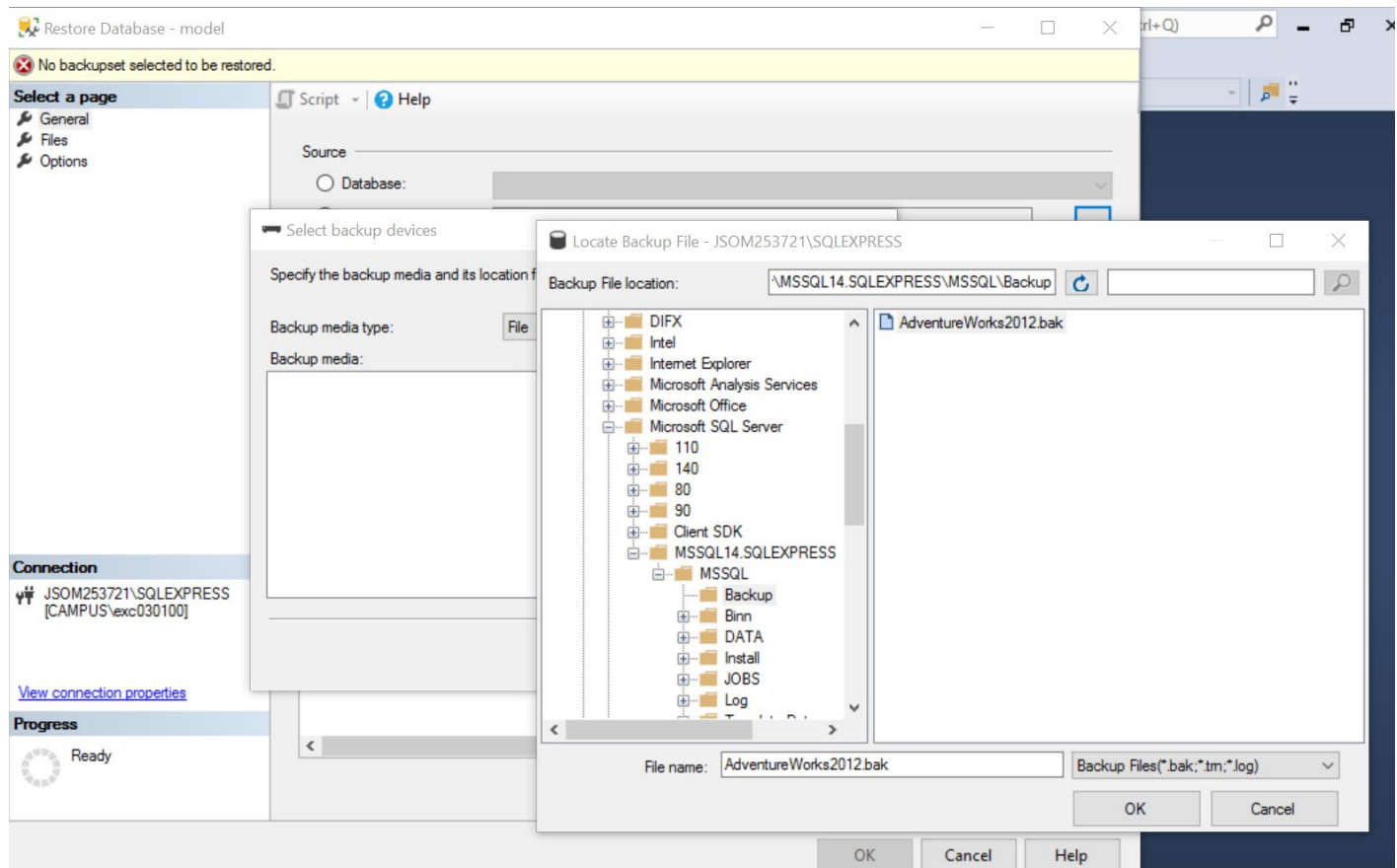
8. OK selection will you bring previous screen. Select Ok again.
9. Select one more time OK from "Restore Database "window.

10. You should have finial installation complete message like this ;
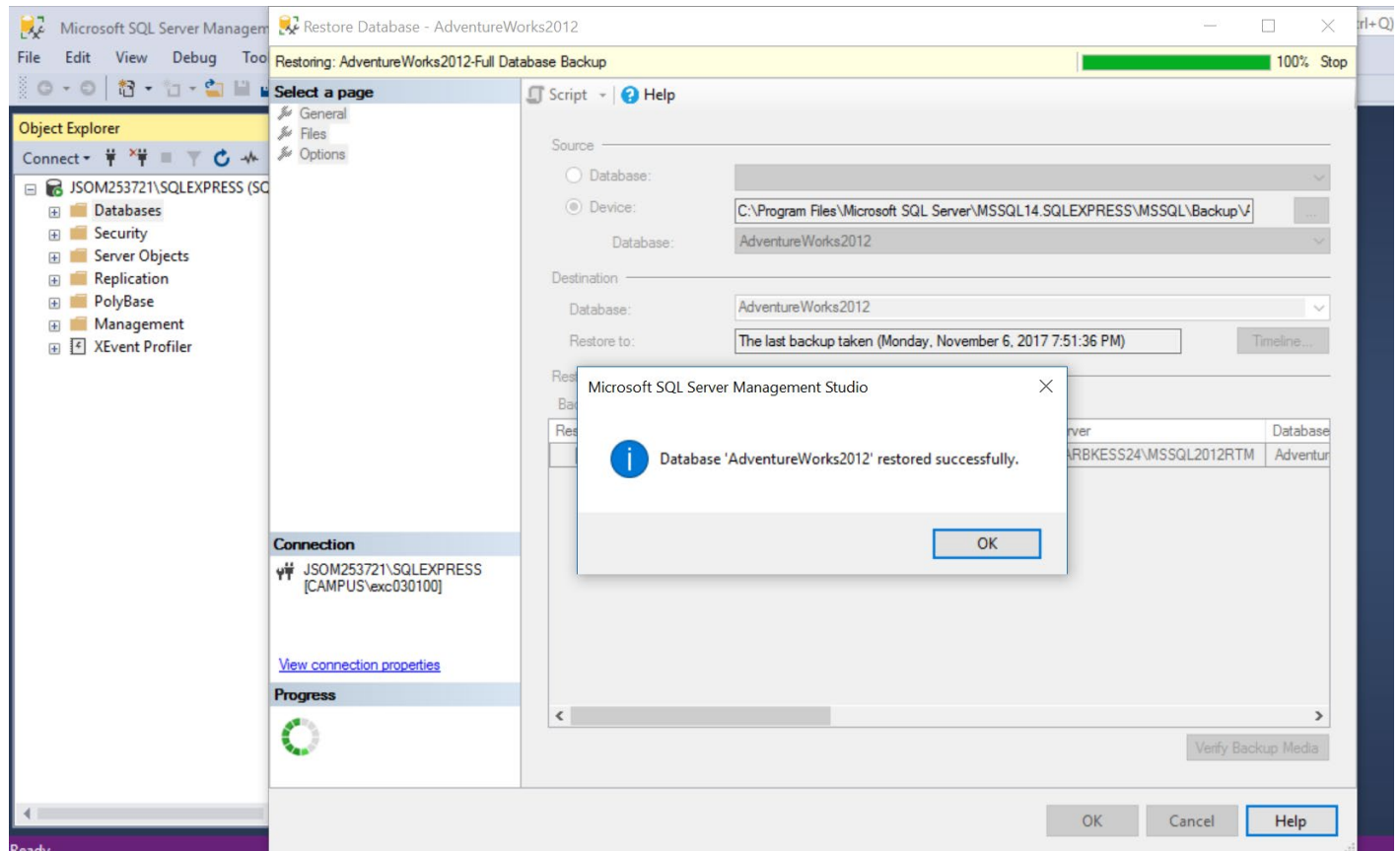
Congrats you are ready for class. Please be aware about this process if you have problem with database instances and/or any kind of error you may need restore same database again again again...

Good luck.
Engin Calisir