Portfolio Projects Showcase

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Description of the Project:

All Portfolio Projects aim to showcase my SQL skills. All SQL projects are performed on Microsoft SQL Server 2019.

Covid project presents data manipulation in order to obtain desired results that would be informative and useful for research purposes of covid impact globally. Project presents probabilities of getting infected and chances of dying after infection, as well as presenting vaccine rollout nationally.

Nashville project aims to clean up database of unwanted records and convert some of data into format that would be easier to read and use, improving data manipulation in future.
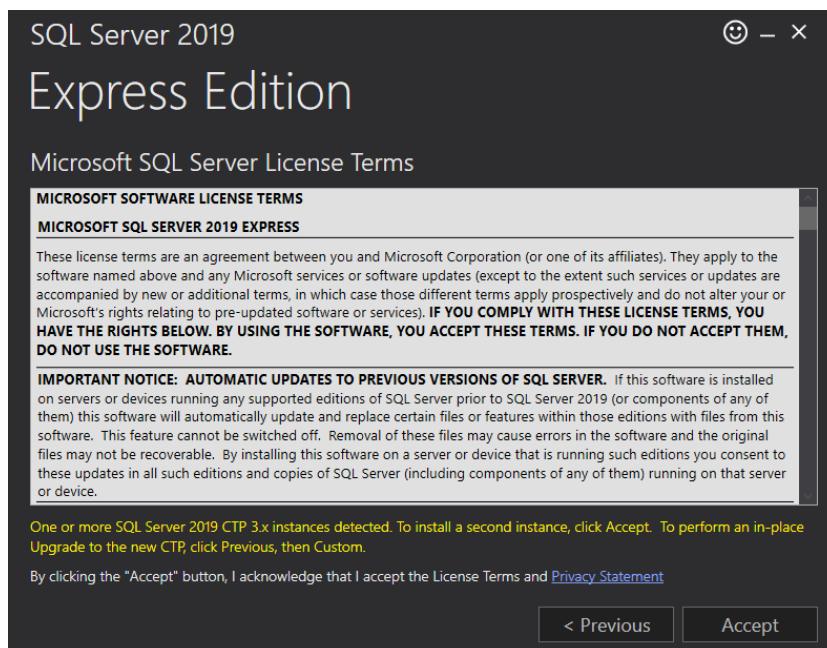
How to Install Project guide

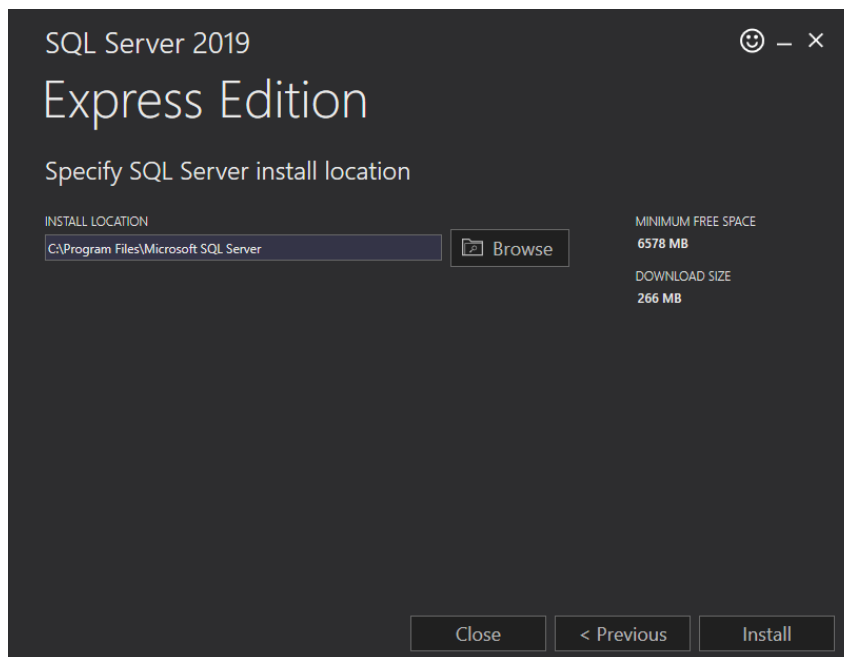To install and import project data follow instructions below:

1. Download Microsoft SQL Server 2019 Express edition from following link
   - https://www.microsoft.com/en-us/sql-server/sql-server-downloads
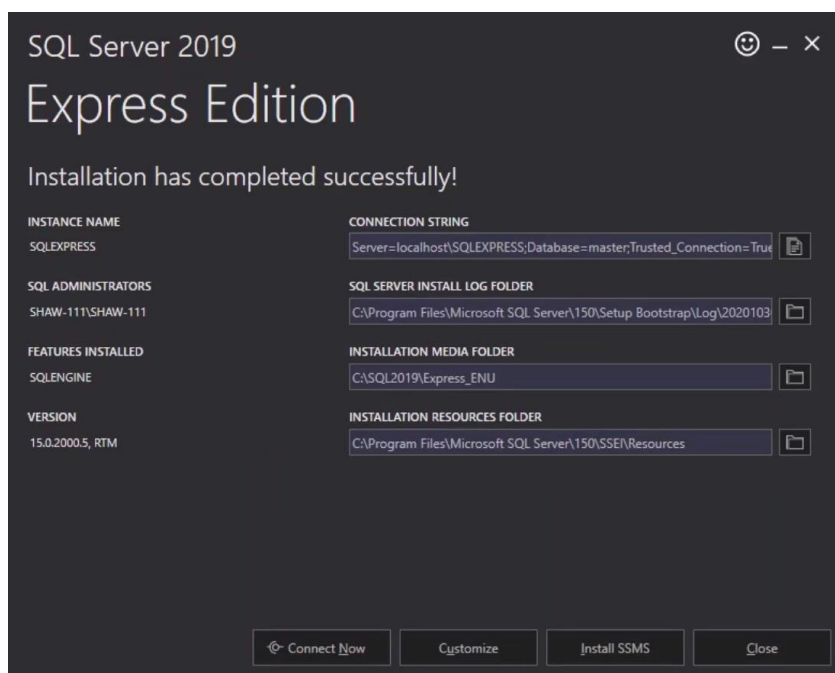2. Install Microsoft SQL Server 2019
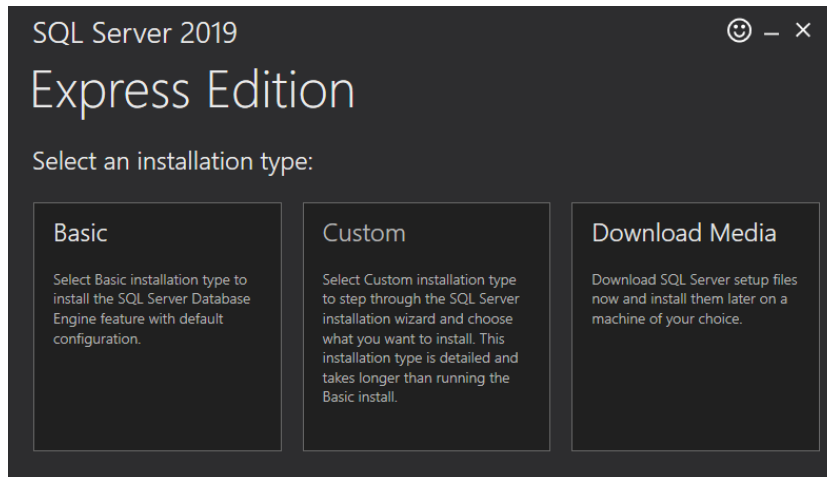
Choose basic version


Agree to terms and conditions

Choose local disc for installation **>** click **'Install'** button

After installation click **'Connect now'** button to connect MS SQL Server to computer **>** finally click on **'Install SSMS'** button to begin installation of SQL Server Management Studio (this will redirect you to website where you will be able to download and install SSMS)

3. Download SQL Server Management Studio from above mentioned website or if previous step will not work, use following link - https://docs.microsoft.com/en-us/sql/ssms/download-sql-server-management-studio-ssms?view=sql-server-ver15

4. Install SSMS by choosing local disc for installation
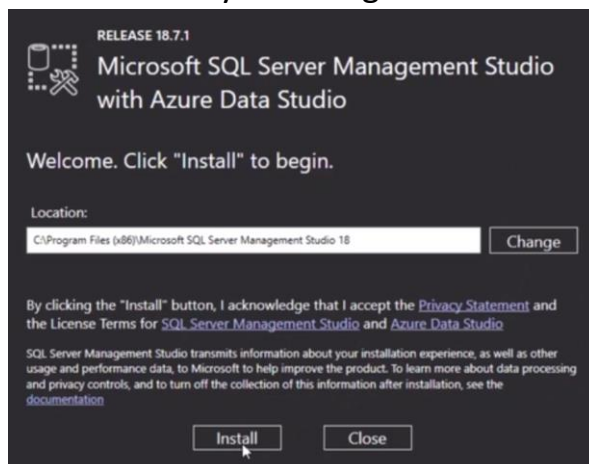
Then click **'Install'** button **>** after installation close SSMS and MS SQL Server installation wizard

5. Run Microsoft SQL Server Management Studio 2018 from Start menu
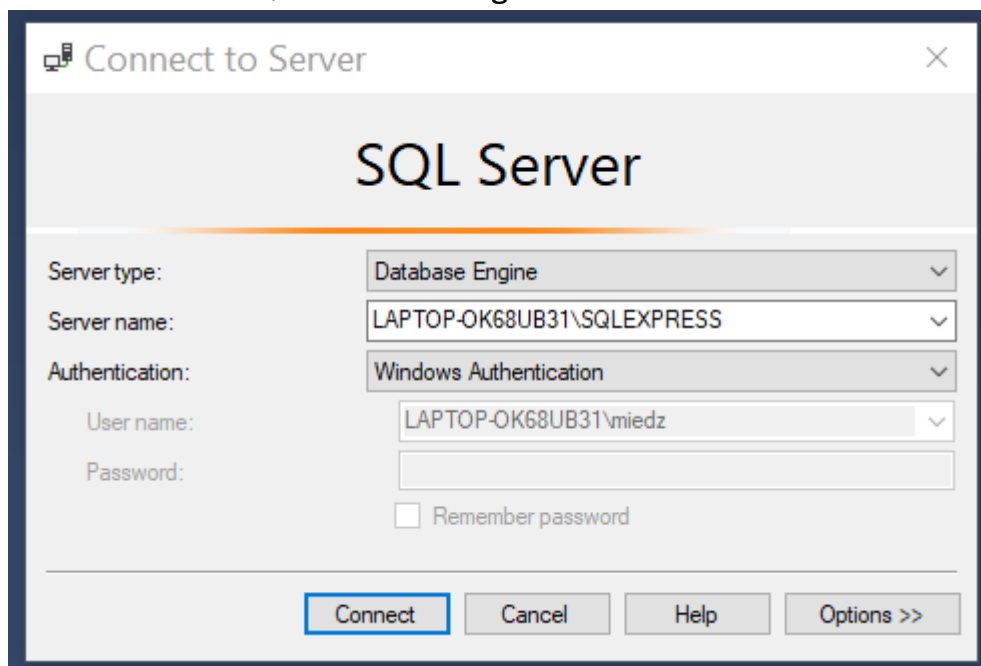
Click **'Connect'** button to connect SSMS with MS SQL Server (leave default setup – Server Type, Server Name and Authentication)

6. Create new query by clicking button **'New Query'** at top of SSMS window
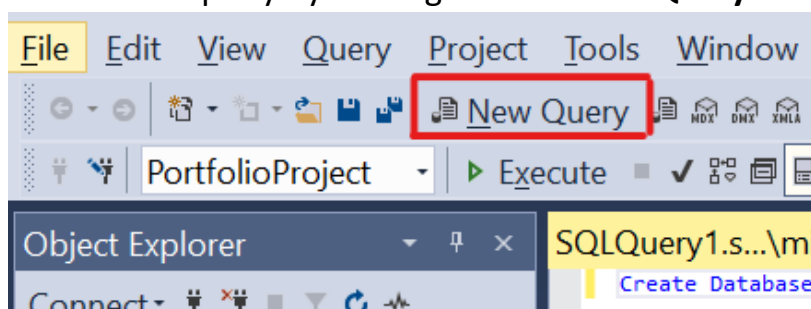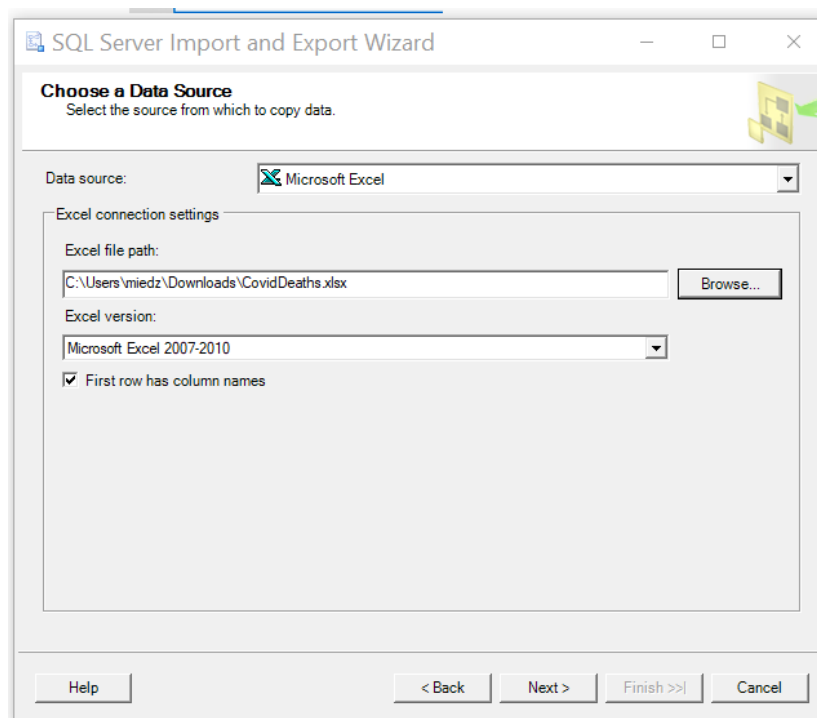
7. Create new database called **'PortfolioProject'** by inserting following code into new query: `Create Database PortfolioProject;`
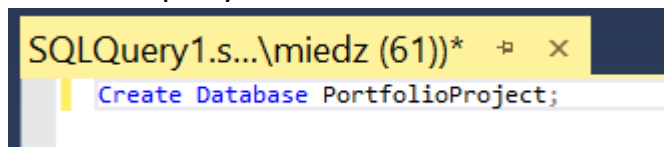
8. Import data from provided excel spreadsheet by opening start menu > locating folder **'Microsoft SQL Server 2019'** and inside clicking on **'SQL Server 2019 Import and Export Data (64-bit)'**
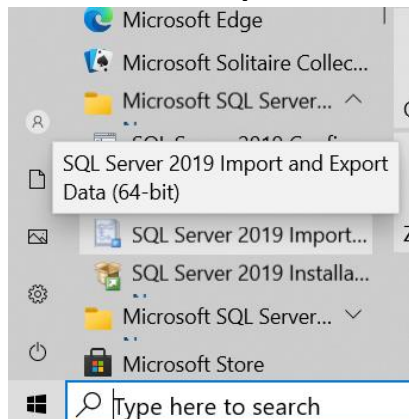
Follow import and export wizard and click **'Next'**

In following section choose data source to be Excel from drop down list **>** find excel file path from your computer that needs to be imported (e.g. CovidDeaths) **>** click **'Next'**

In next section choose destination of imported data to be **'SQL Server Native Client 11.0'** > Server name should match your server's name used for connection by SSMS > choose correct database from dropdown list **'PortfolioProject' >** click **'Next'**
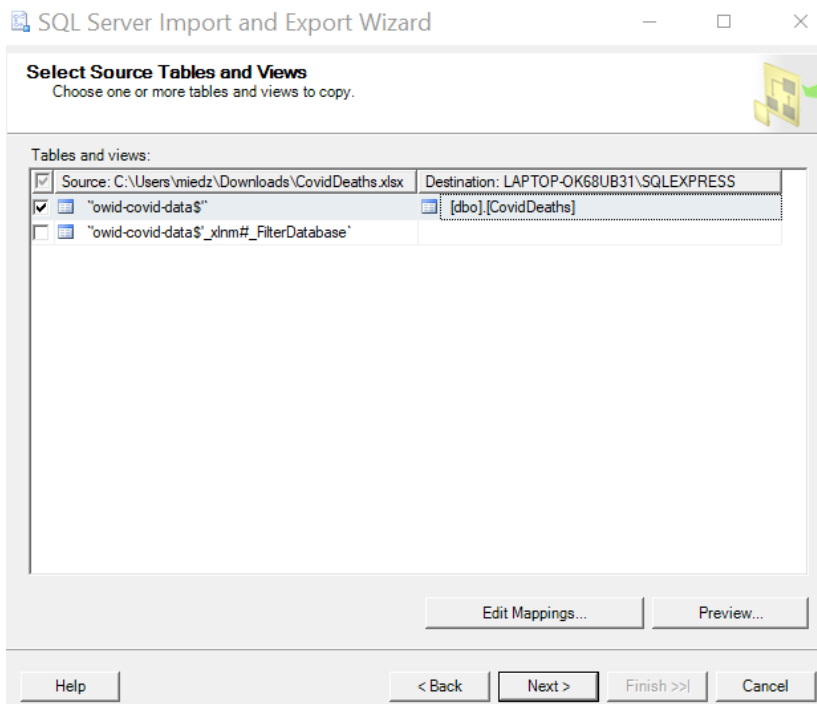

In following sections choose **'Copy data from one or more tables or views' >** click **'Next'**

In next section choose first entry from source (top entry) > in destination cell change name of record to **'[dbo].[CovidDeaths]'** (follow same procedure when entering name of destination record of other data sets from CovidVaccination and NashvilleHousing) > click **'Next'**
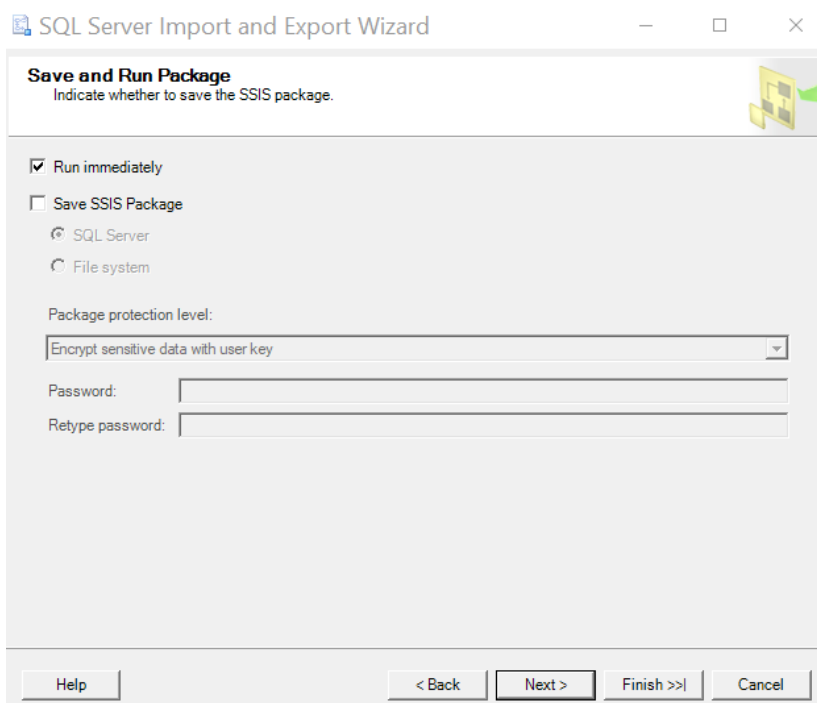
In following section make sure **'Run immediately'** is checked > click on **'Finish'** twice to start import of data > when procedure is finished close Import and Export wizard
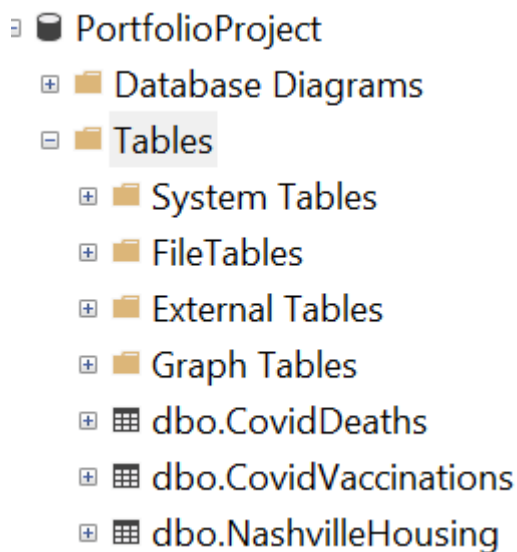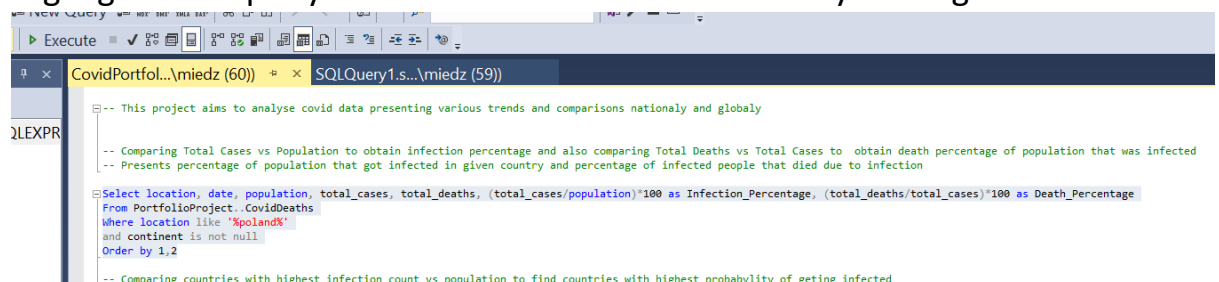
Check in SSMS, in object explorer on left side under Database **>** PortfolioProject **>** Tables that you have correctly imported all data sets into PortfolioProject database and that names display as above (if names do not match above picture, triple click on the name and retype to match above example)

How to use Project guide

To run project, follow instructions below:

1. Open SQL Service Management Studio > Connect to your server > Create new query
2. Locate SQL Project file **'CovidPortfolioProject1.1.sql'** (it should be in Download folder when downloaded from Github or it can be opened in Github by clicking **'CovidPortfolioProject1.1.sql'**)
3. Drag and drop **'CovidPortfolioProject1.1.sql'** from download to new query or copy all of the code from Github into new query
4. Highlight each query at a time and run them in SSMS by clicking **'Execute'**

Results of query will be shown in bottom part of SSMS below New Query window

5. Read comments in green to find out what following query will present or perform on given data set and in some queries, you can change name of searched data to find desired results (e.g. in first query presented above you can change name of country to inspect percentage of population that got infected with Covid in that given country by entering name of the country in section '%poland%'

6. Follow same procedure from previous steps in order to run Nashville Housing Project