



Instructor:

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CLO

Learning Objectives:

- Installation of SQL server and SSMS.
- Create a new database named Northwind
- Restore Schema using scripts northwind.sql
- Restore schema data using northwind_data.sql

1. System Requirements for SQL Server 2019

1.1. Operating system

Windows 10 TH1 1507 or greater and Windows Server 2016 or greater

1.2. .NET Framework

SQL Server 2016 (13.x) RC1 and later require .NET Framework 4.6 for the Database Engine, Master Data Services, or Replication. SQL Server setup automatically installs .NET Framework. You can also manually install .NET Framework from [Microsoft .NET Framework 4.6 \(Web Installer\) for Windows](#).

1.3. Disc Space

SQL Server requires a minimum of 6 GB of available hard-disk space.

1.4. Memory

At least 4 GB and should be increased as database size increases to ensure optimal performance.

1.5. Processor

- **Minimum:** x64 Processor: 1.4 GHz, **Recommended:** 2.0 GHz or faster
- x64 Processor: AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support

1.6. Monitor

SQL Server requires Super-VGA (800x600) or higher resolution monitor.

2. Installation guide

Important Note:

- 2.1. connect your system with internet and download the developer edition using this given link: <https://www.microsoft.com/en-us/sql-server/sql-server-downloads>
- 2.2. Login on window with as Administrator

Or, download a free specialized edition

 Developer <p>SQL Server 2019 Developer is a full-featured free edition, licensed for use as a development and test database in a non-production environment.</p> <p>Download now ></p>	 Express <p>SQL Server 2019 Express is a free edition of SQL Server, ideal for development and production for desktop, web, and small server applications.</p> <p>Download now ></p>
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Figure 1: SQL downloading version

- 2.3. Once downloaded then click on the .exe file and run.

2.4. Then click on Basic version to install.

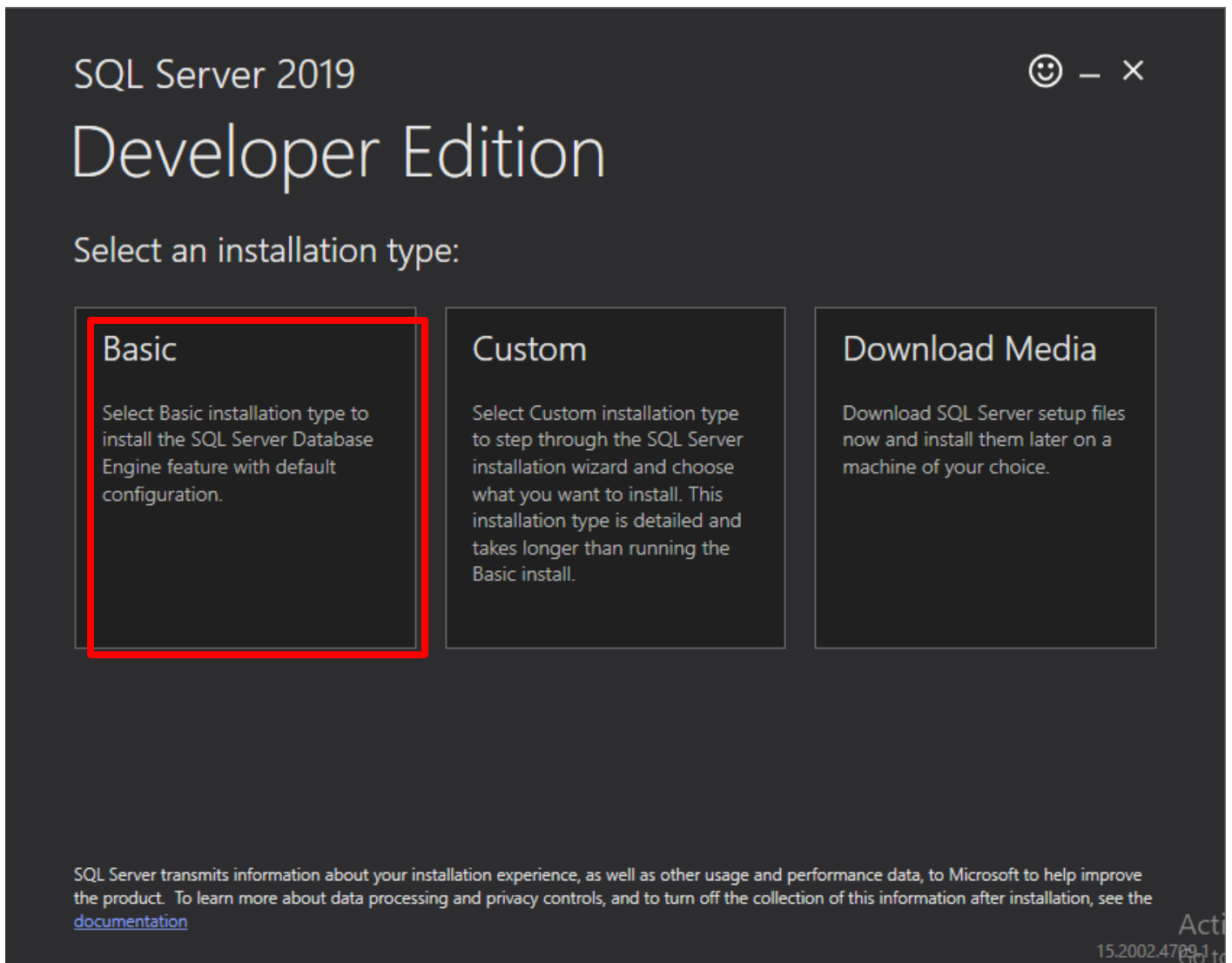


Figure 2: Selection of basic version

2.5. Scroll down and then click on accept.

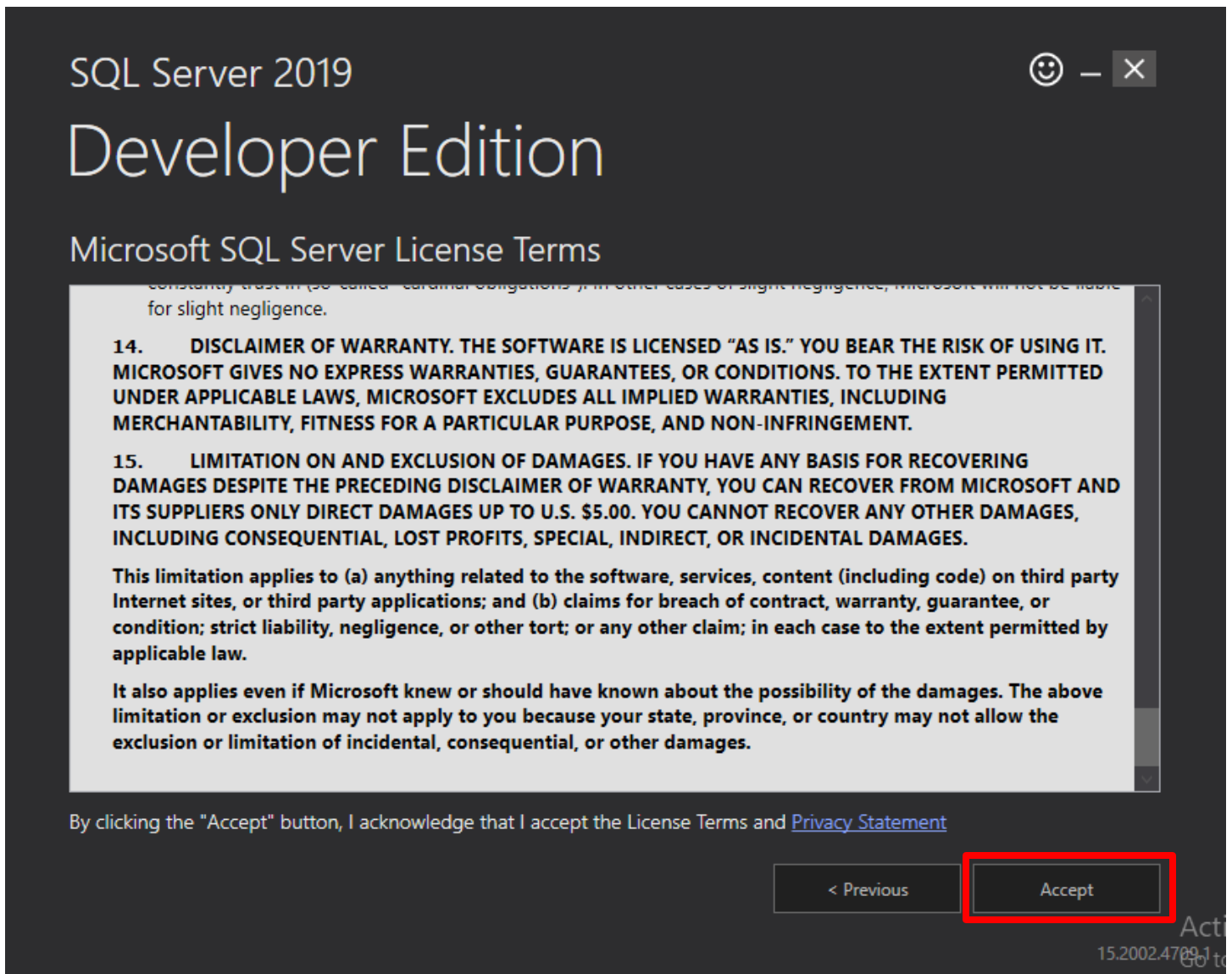


Figure 3: Terms and conditions for installing SQL Server

2.6. Click on Install and eat pop corns until installation is done. 😊

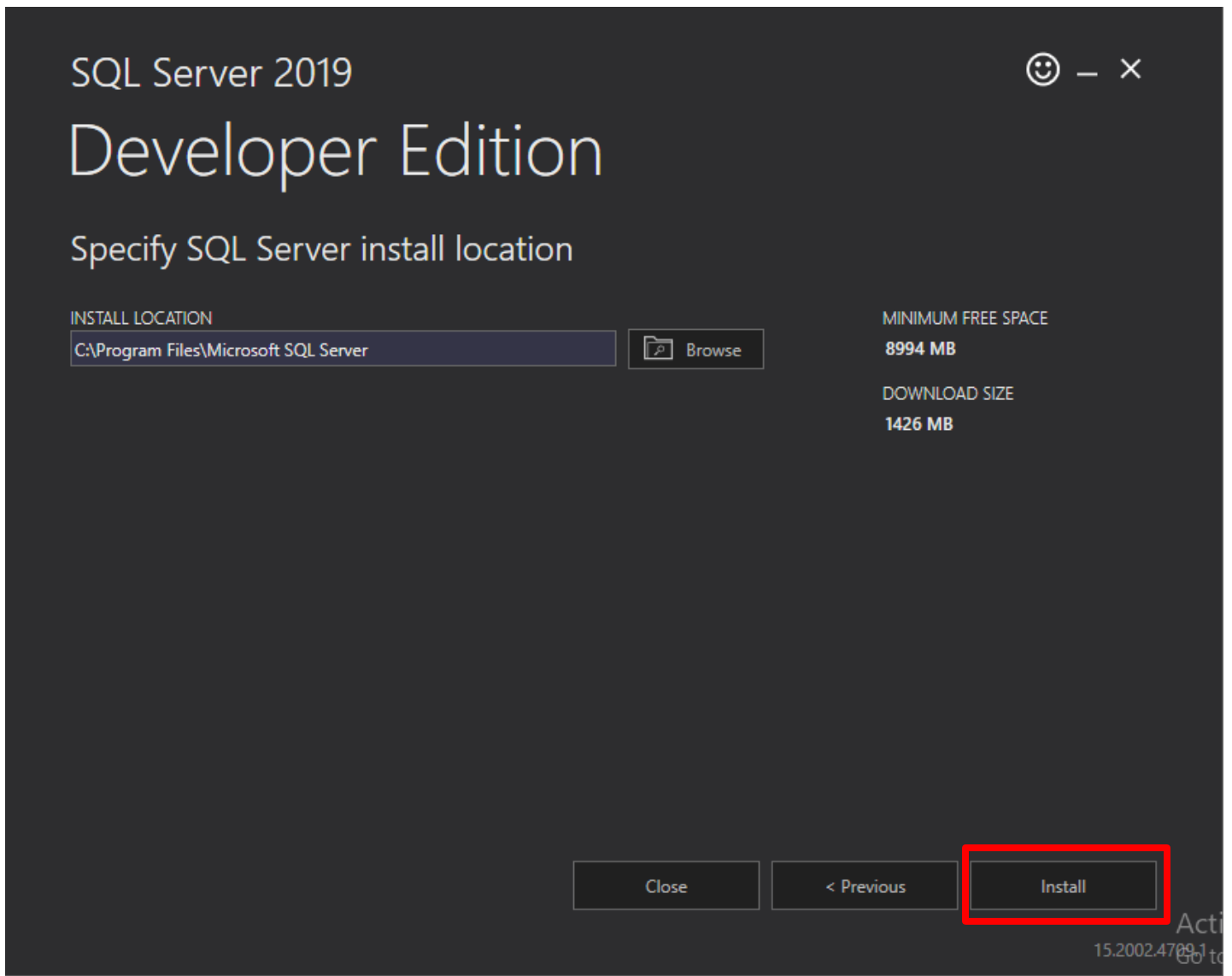


Figure 4: Starting the installation process by clicking on install button

2.7. After installation is done click on install SSMS

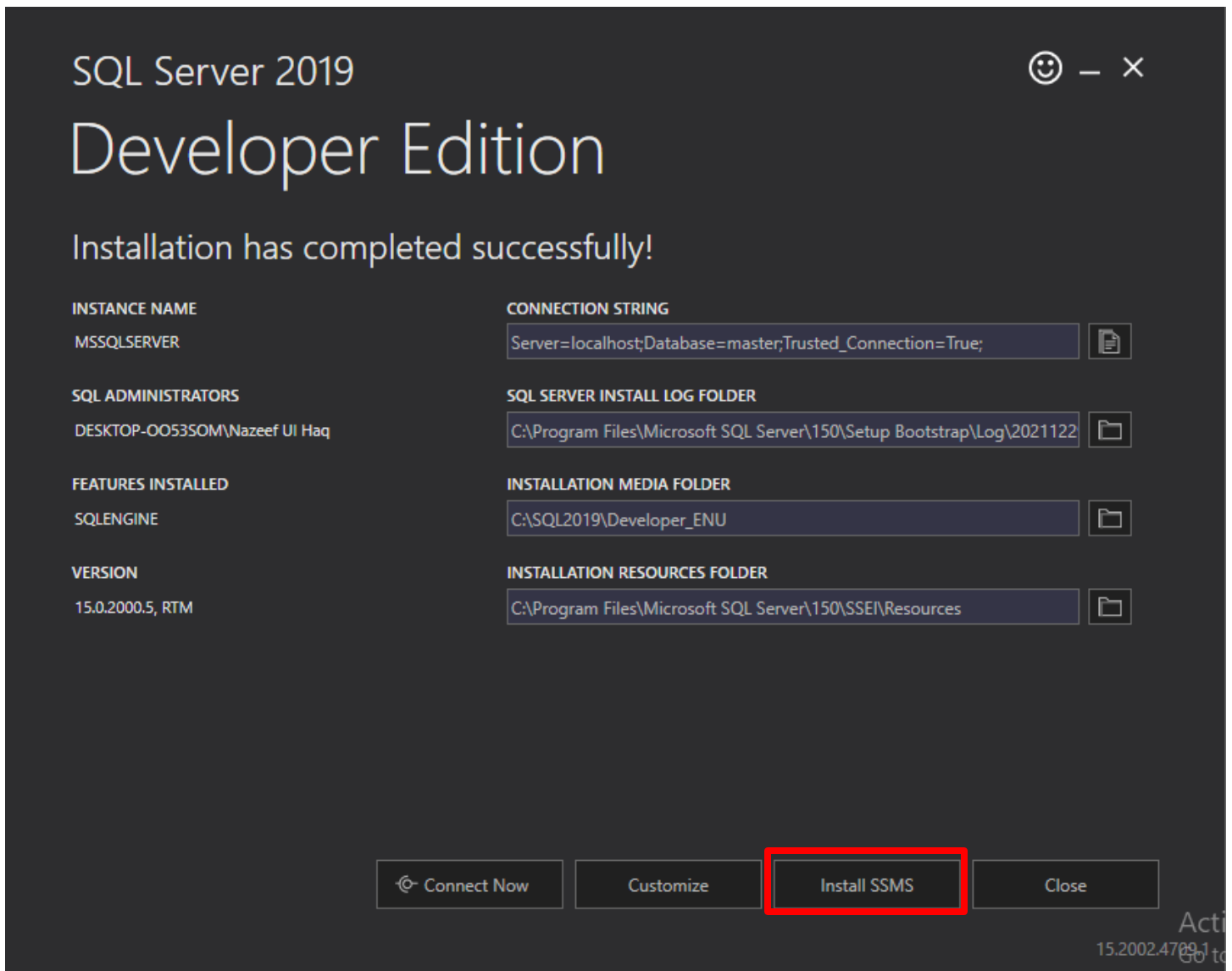






Figure 5: Installation has completed successfully

- 2.8. Click on highlighted link. It will download .exe file of SSMS. After downloading run .exe file.

Download SQL Server Management Studio (SSMS)


Article • 12/08/2021 • 7 minutes to read •  +35 [Is this page helpful?](#) 

Applies to:  SQL Server (all supported versions)  Azure SQL Database  Azure SQL Managed Instance  Azure Synapse Analytics

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database. SSMS provides tools to configure, monitor, and administer instances of SQL Server and databases. Use SSMS to deploy, monitor, and upgrade the data-tier components used by your applications, and build queries and scripts.

Use SSMS to query, design, and manage your databases and data warehouses, wherever they are - on your local computer, or in the cloud.

Download SSMS

 [Free Download for SQL Server Management Studio \(SSMS\) 18.10](#) 

SSMS 18.10 is the latest general availability (GA) version. If you have a previous GA version of SSMS 18 installed, installing SSMS 18.10 upgrades it to 18.10.

- Release number: 18.10
- Build number: 15.0.18390.0

Figure 6: Version of SSMS for installation

- 2.9. Click on Install and wait until installation is done successfully.

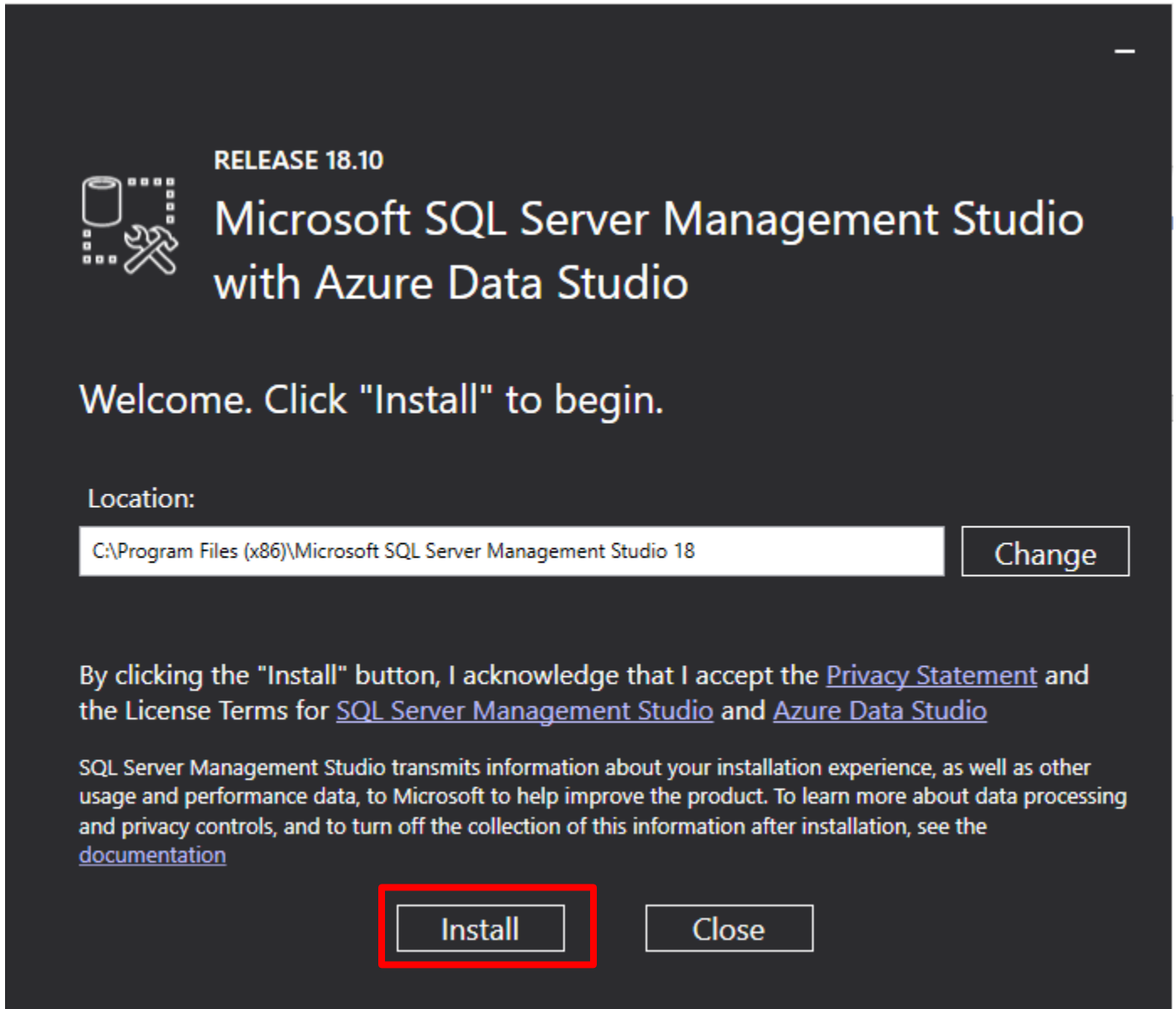


Figure 7: Installation of SSMS

3. Generate Scripts of a schema

- **Step 1**

Right click on your database and select Task -> generate script.

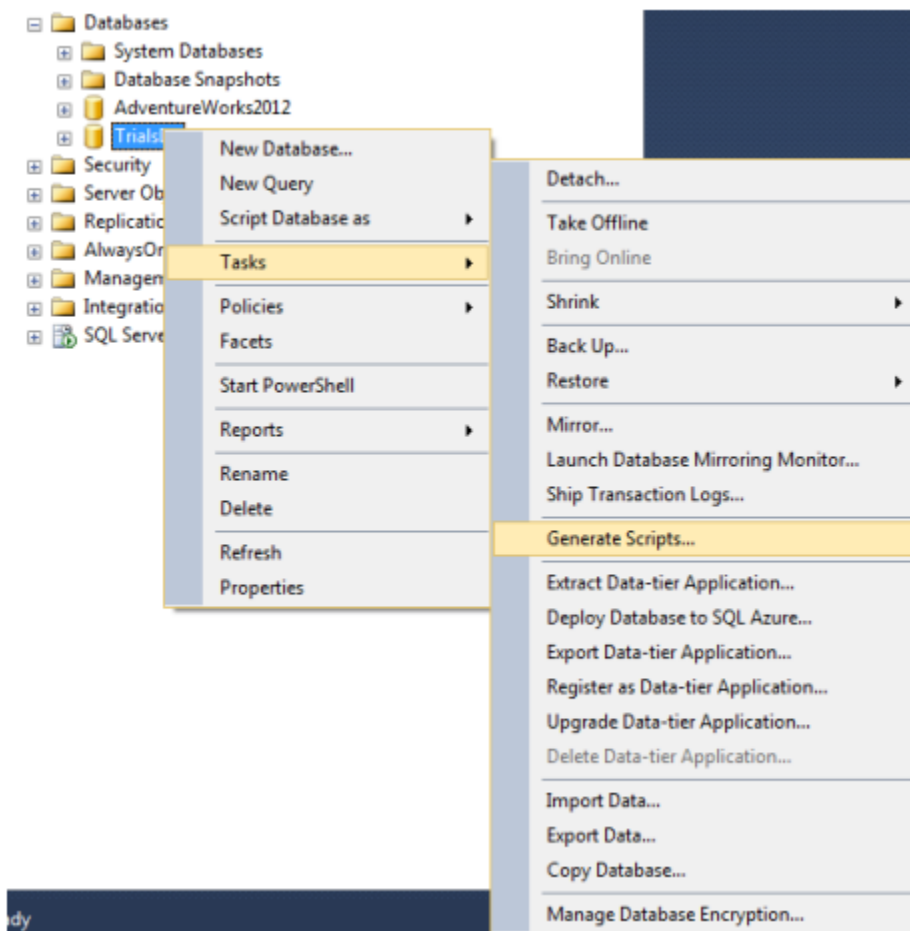


Figure 8: Database_Scripts_With_Data_Select_Option

- **Step 2**

Click next in the introduction screen

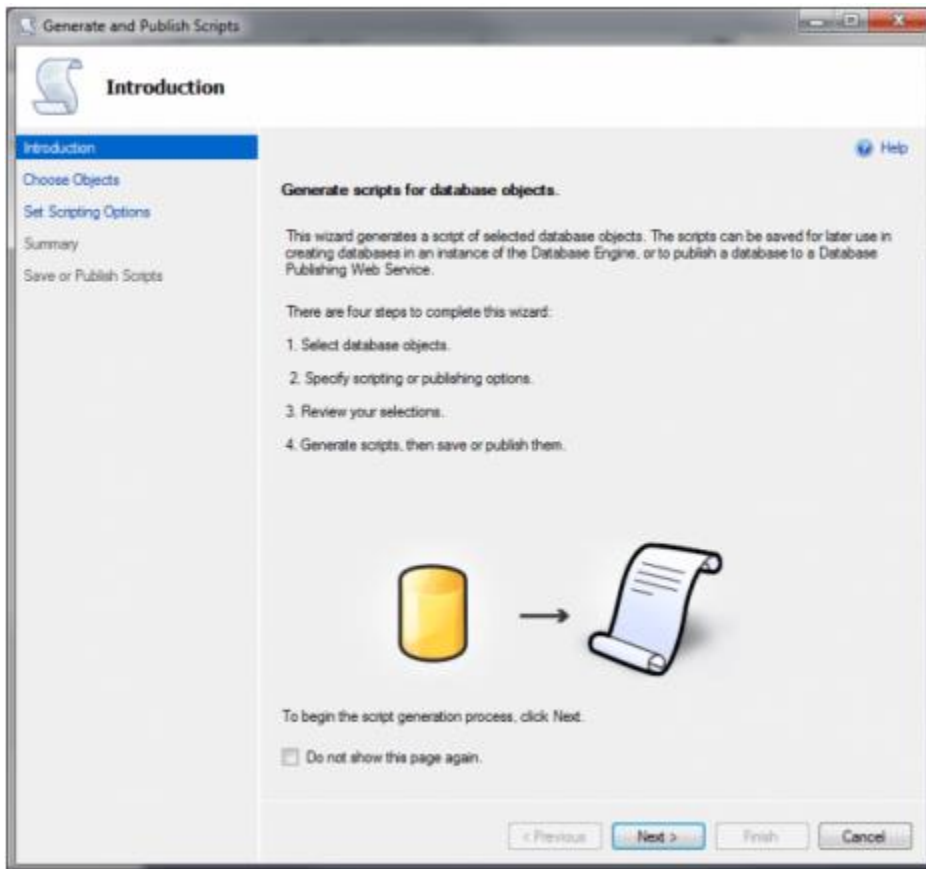


Figure 9: Database_Scripts_With_Data_Introduction

- **Step 3**

Select the database object which you are all you need and then click next.

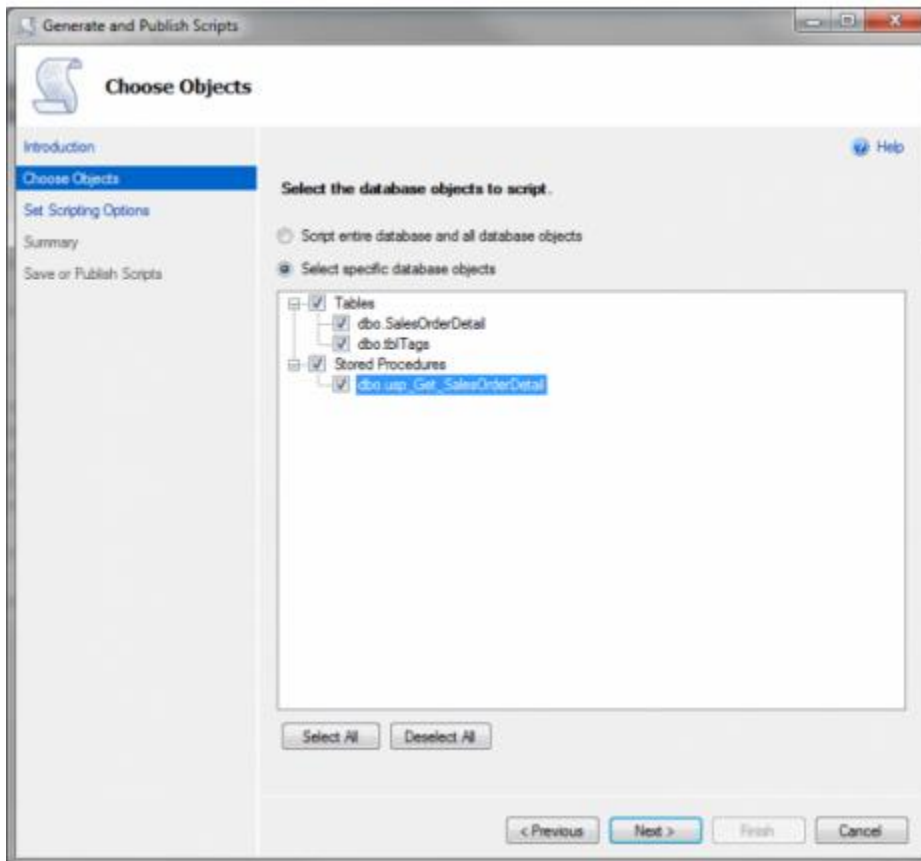


Figure 10: Selecting database objects

- **Step 4**

Now you will be shown a window which asks you about how your script should be published.

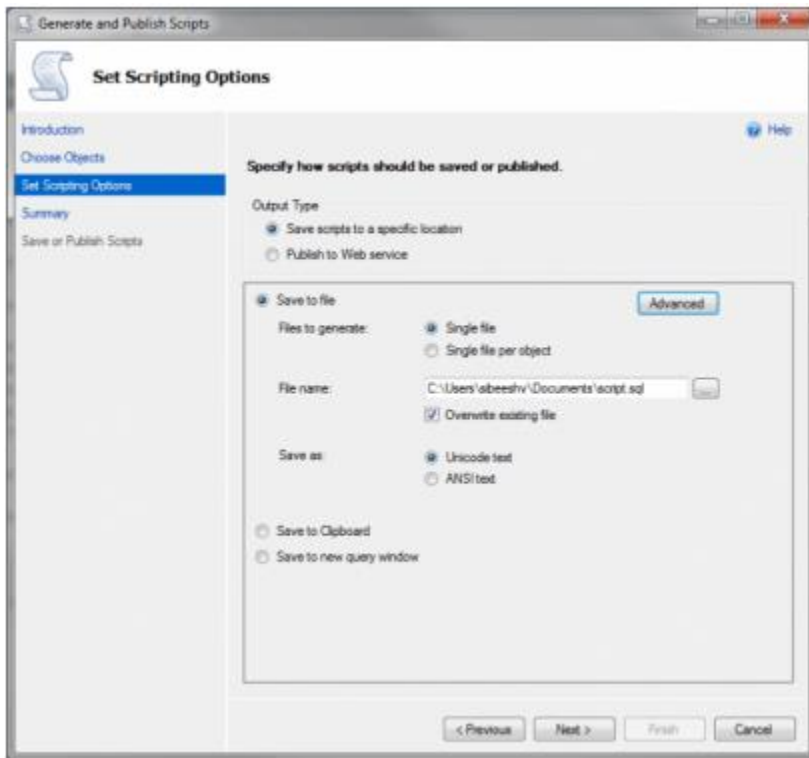


Figure 11: Database_Scripts_With_Data_Publish_Options

Click on advanced in that window.

- **Step 5**

Select 'Schema and data' from type of data to script option and then click OK.

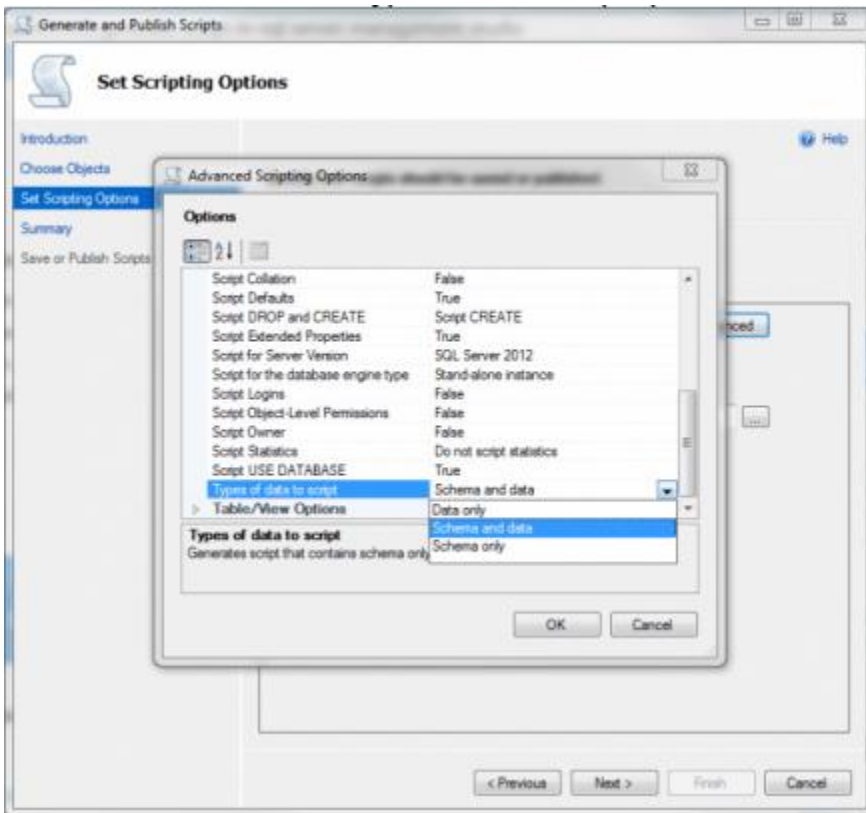


Figure 12: Database_Scripts_With_Data_Advanced

Click on Next.

- **Step 6**

Click finish, now check the script file, it must be having the insert queries too.

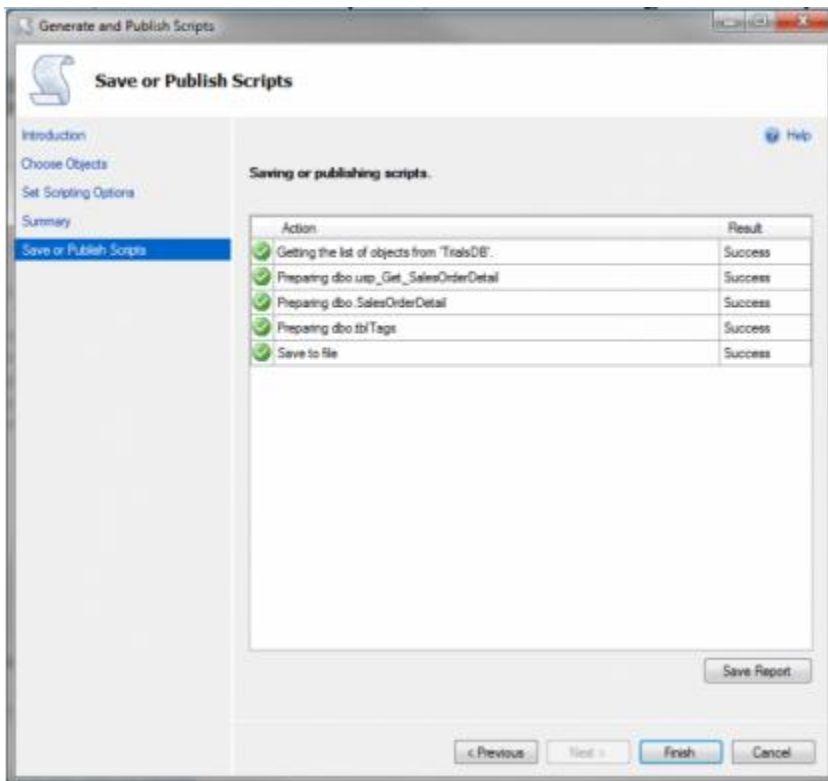


Figure 13: Database_Scripts_With_Data_Finish

Now what else is pending, go ahead and run your script.

4. Lab Tasks

1. Create a new database named TestDB_2022_CS_X
2. Create a new table named student using 5 to 6 attributes
3. Generate Scripts of your database
4. Restore your schema to another machine
5. Generate scripts of data
6. Restore data to other system as well