

SSIS 1st video summary

What is SSIS (SQL Server Integration services)

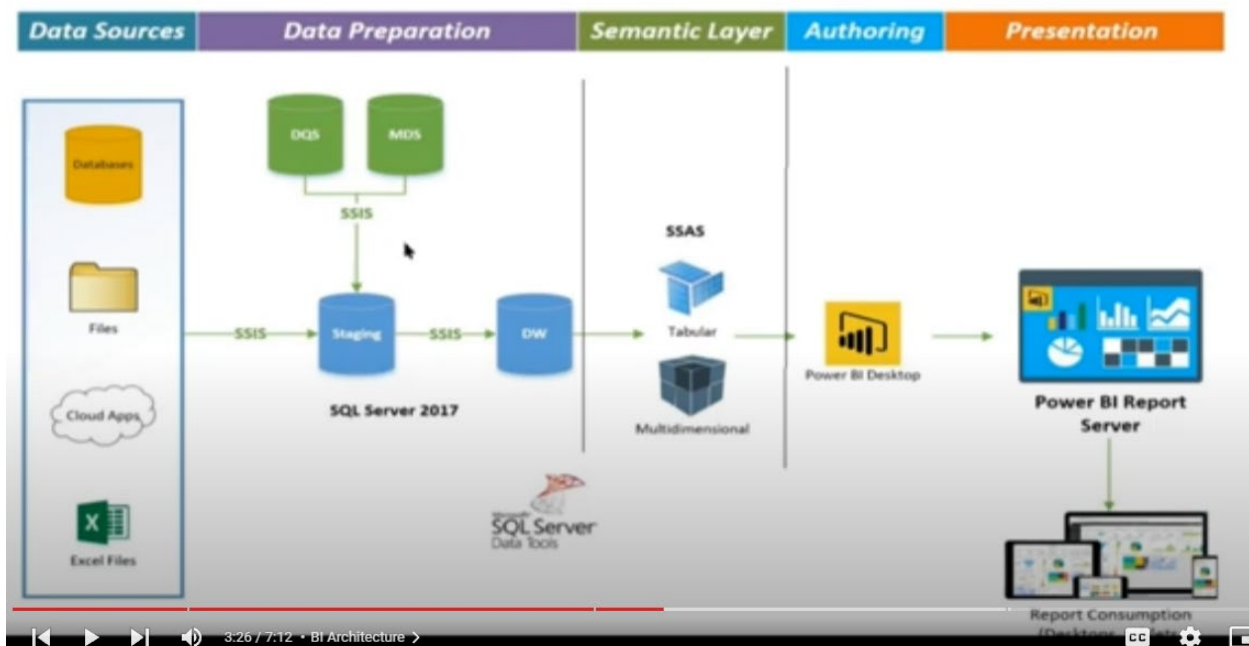
- ❑ It's ETL tool (Extract , Transform , Load)
- ❑ Used mostly in Data warehousing projects
- ❑ Used for Data Migration projects
- ❑ Database maintenance activities

sql ↔ oracle

Rebuild indexes, cleaning something

BI Architecture

BI Architecture



Topics

Topics - Fundamentals

1) **What is Control flow** (Navigate to SSIS Projects and different Windows)

2) **What is Data Flow**

a) Loading a Simple file into Database(Basics Of SSIS)

4) **Transformations**

a) Basic Transformations (Derived column, Merge, Sort, Casting)

b) Advanced Transformations (Lookup and Group By and Unpivot)

5) **Control Flow Tasks**

a) Common Tasks Execute Sql , Call Procedure

b) Filesystem Task, Execute Process task

6) **Precedence Constraints**

a) Expression and Constraint

7) **What is Containers**

8) **Looping in SSIS**

Topics - Implementation

9) Datawarehouse Concepts

- a) What is Dimension
- b) What is Fact

10) **Demo** on how to Populate Dimensions

11) **Demo** on how to Populate Fact

12) Event Handlers

13) Performance Improvements

14) **Sql Server Integration Services Catalog**

- a) Create SSISDB

15) **Deployment in SSIS Catalog**

- a) Deployment types (package / Project)

16) **Sql Agent**

- a) Scheduling

b) Automation

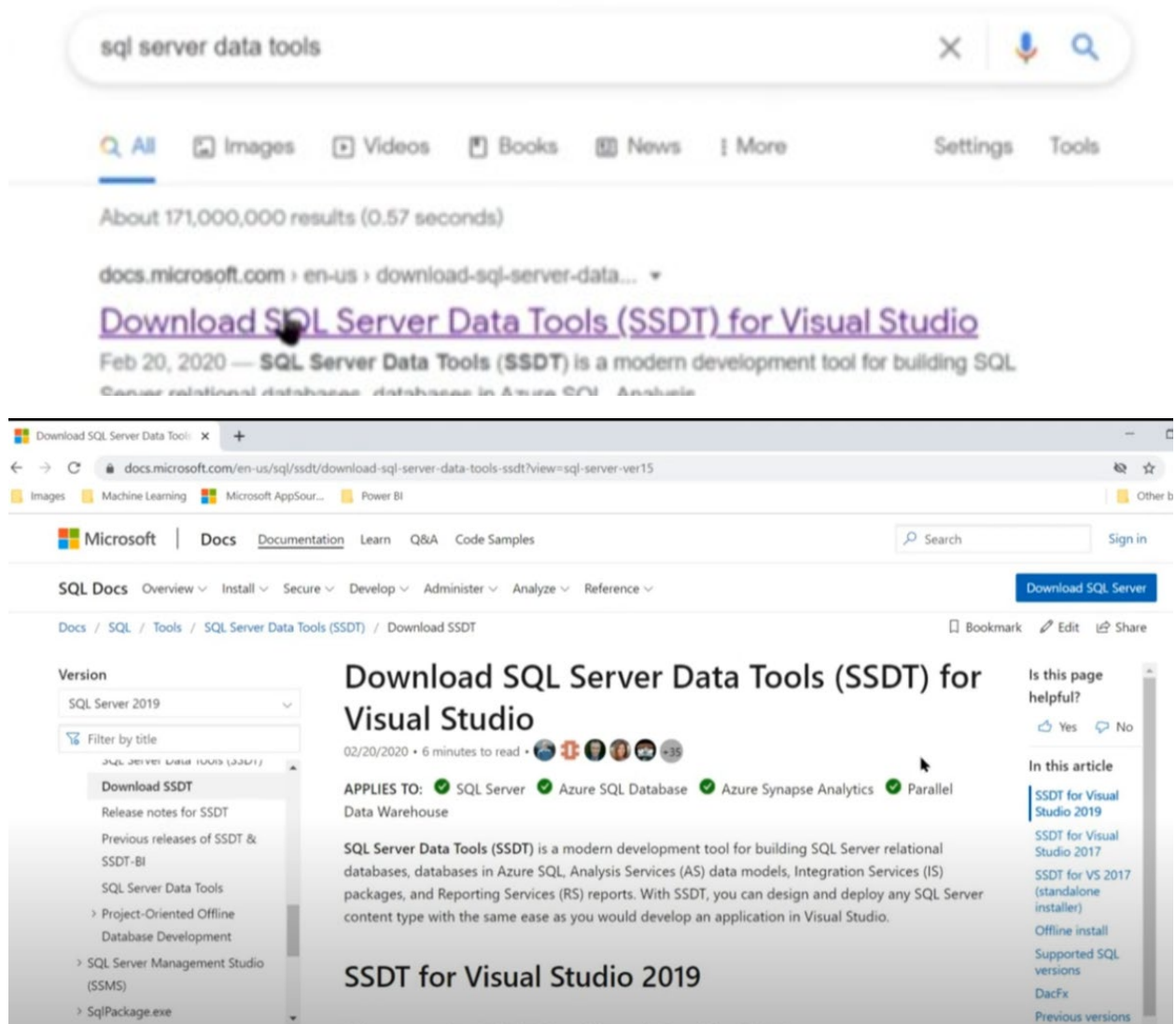
SSIS 2nd video summary

Data tools

- ☐ To Create SSIS, SSAS, SSRS Projects
- ☐ Visual studio 2019 / 2017
- ☐ Stand alone Installment

The Google logo is displayed in its standard multi-colored font.A Google search bar is shown with the text "sql server data tools" entered. A clock icon is on the left and a microphone icon is on the right.

🕒 sql server data tools 🔊

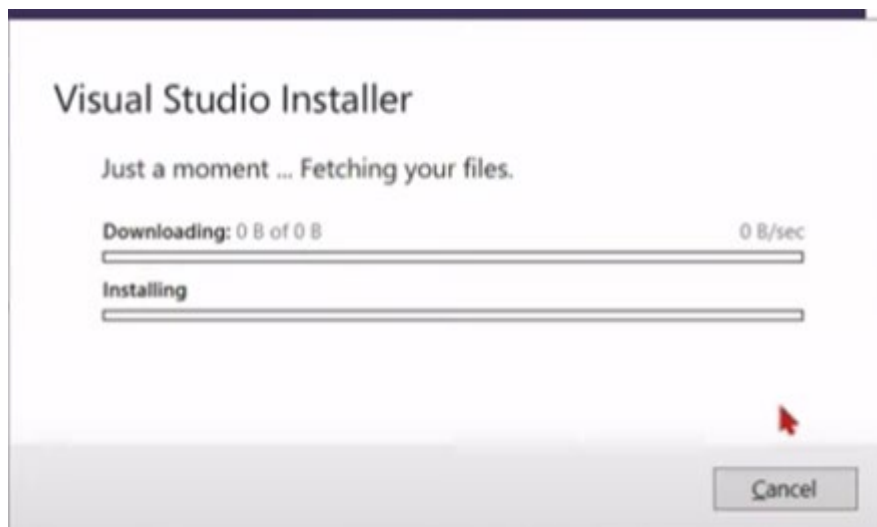
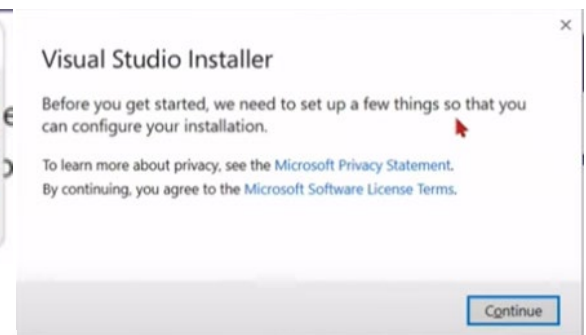
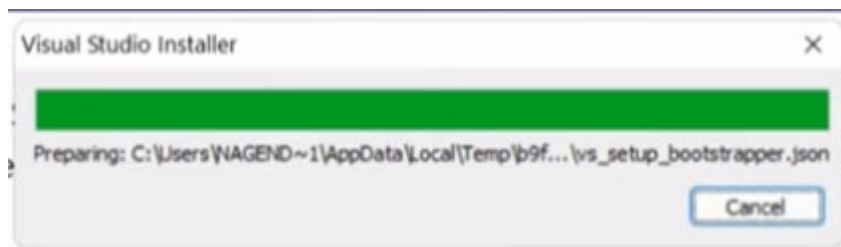
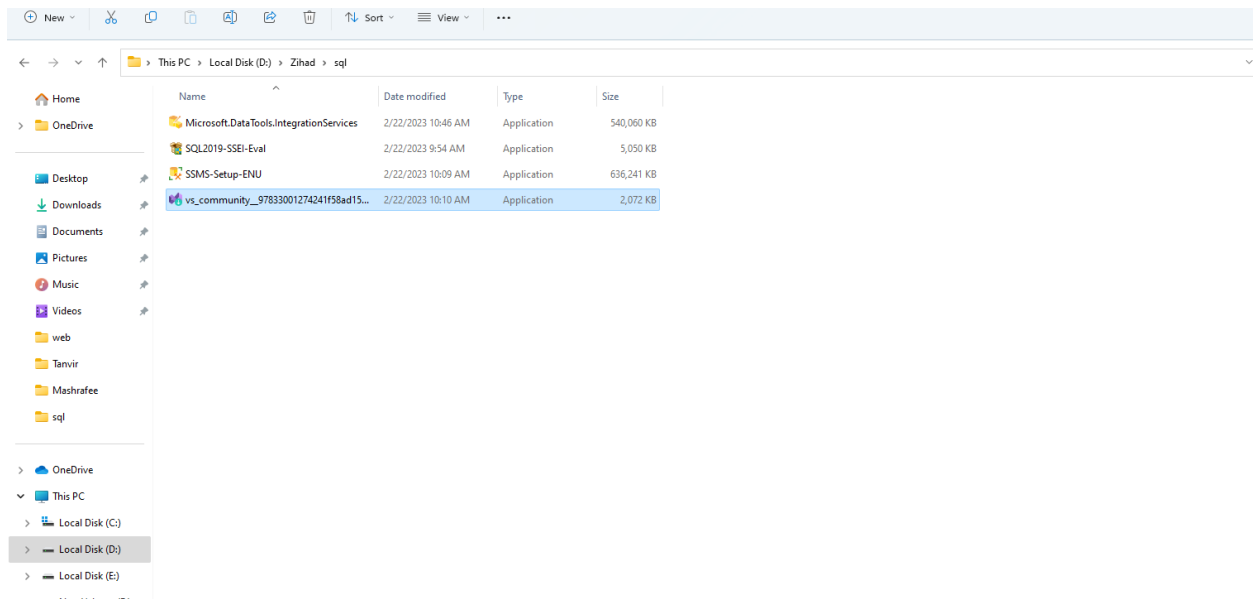


SSIS 3rd video summary

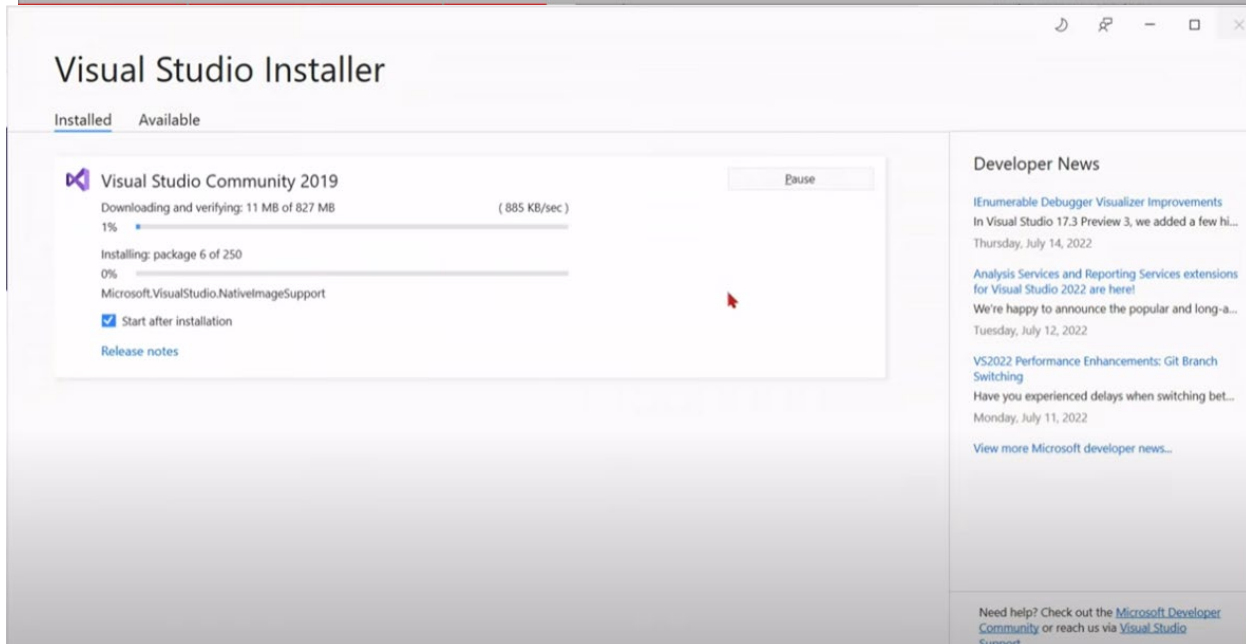
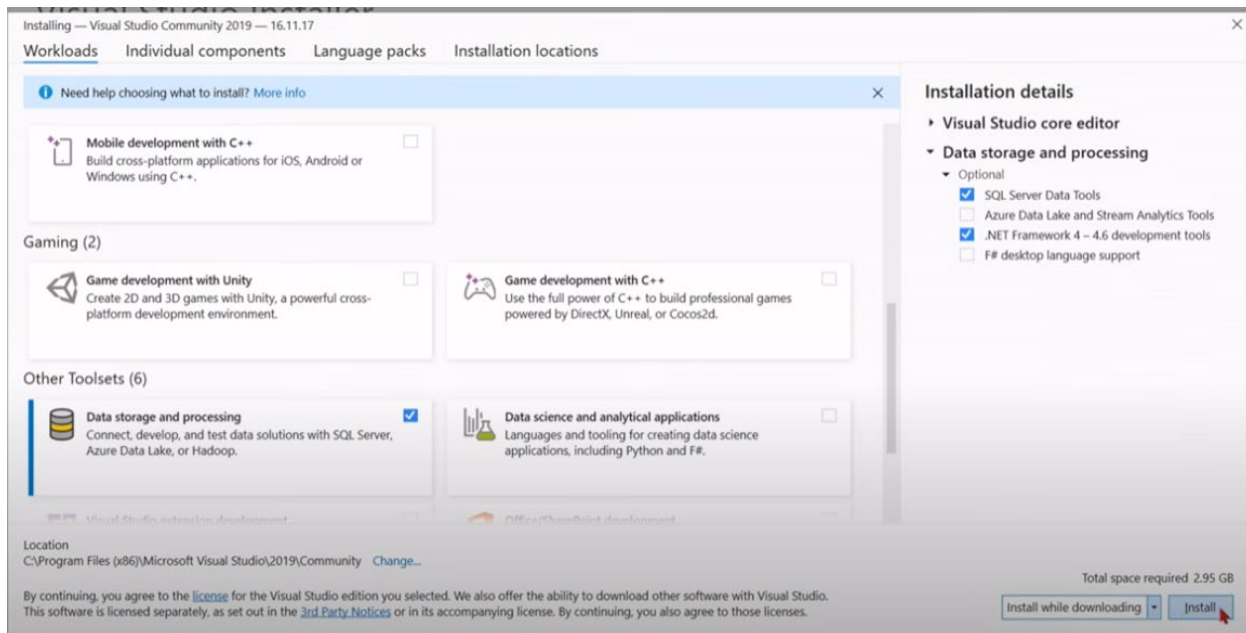
First of all, I have all downloaded files I will provide you if you cannot download it. So don't worry!

Installation of visual studio 2019

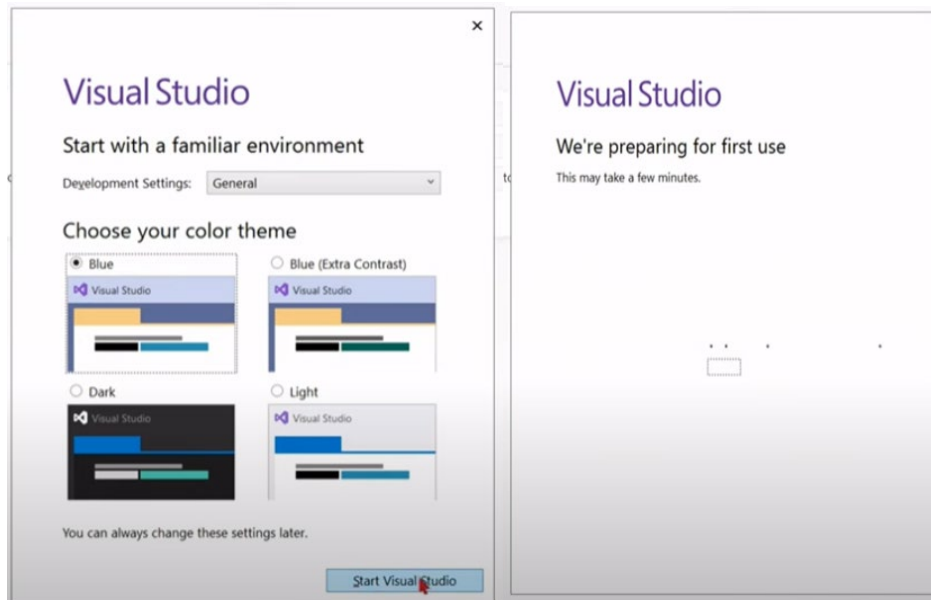
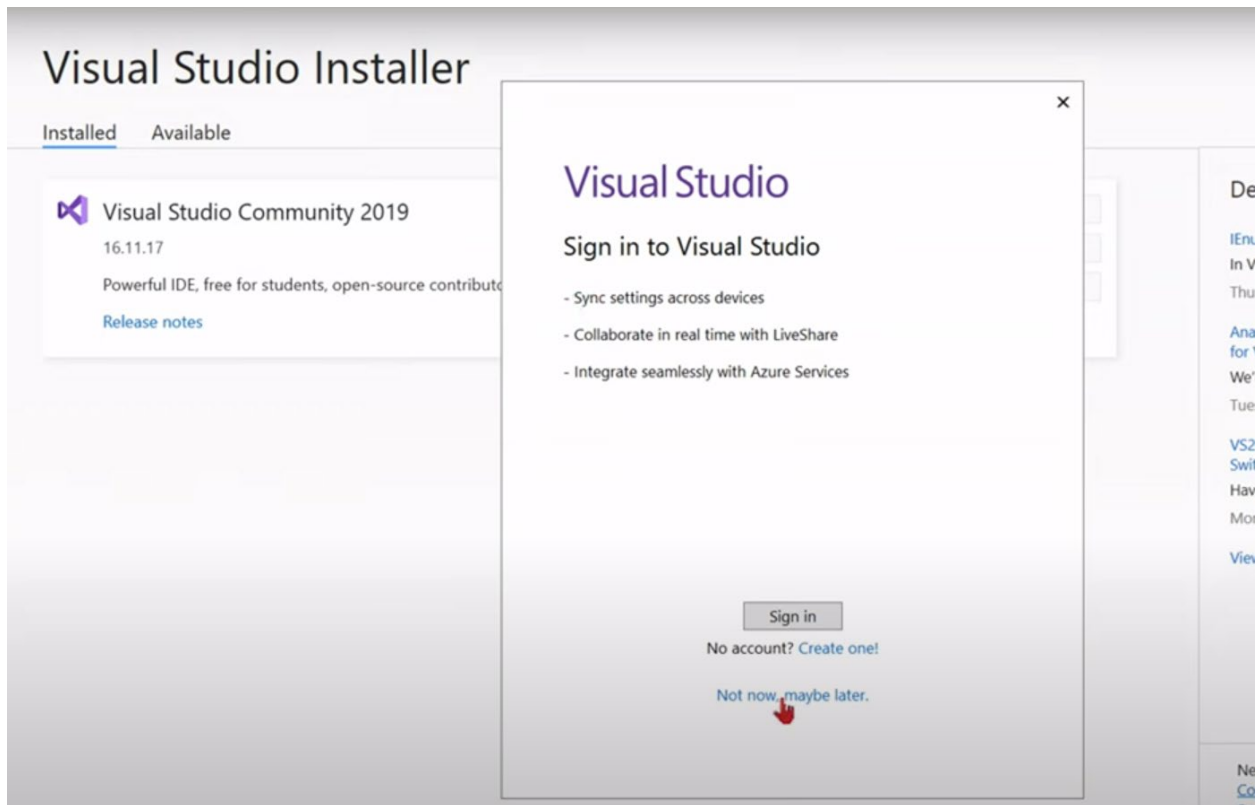
Click the installer file



Choose the **Data storage and processing** option with **SQL Server Data Tools**, **.NET framework development tools**



If you have Microsoft account you may log in otherwise you may choose **Not now option**



Complete these two steps





Visual Studio 2019

Open recent

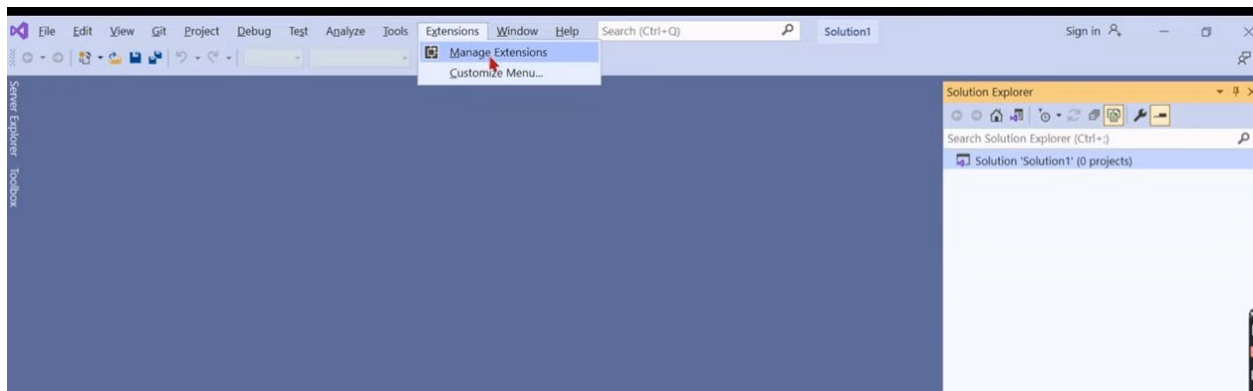
As you use Visual Studio, any projects, folders, or files that you open will show up here for quick access.

You can pin anything that you open frequently so that it's always at the top of the list.

Get started

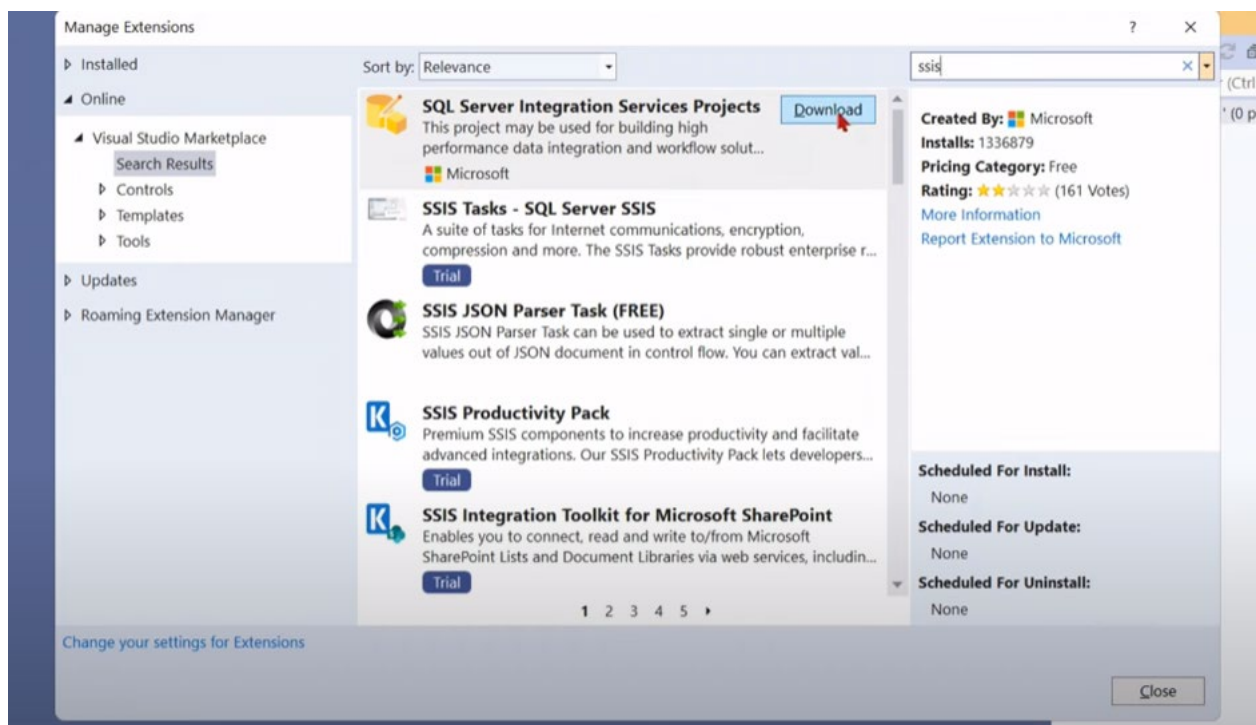
-  **Clone a repository**
Get code from an online repository like GitHub or Azure DevOps
-  **Open a project or solution**
Open a local Visual Studio project or .sln file
-  **Open a local folder**
Navigate and edit code within any folder
-  **Create a new project**
Choose a project template with code scaffolding to get started

 [Continue without code](#) →

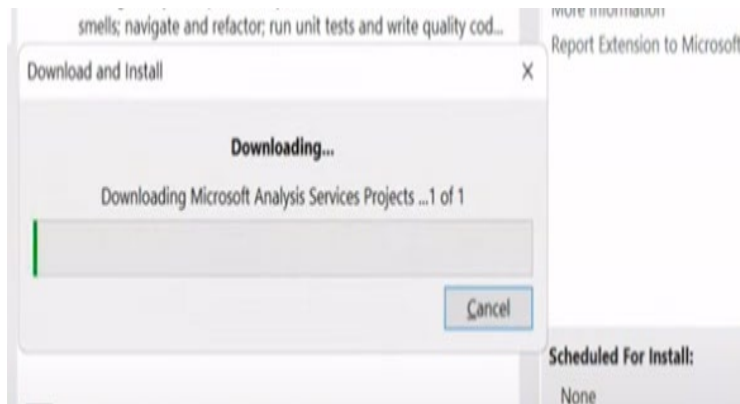
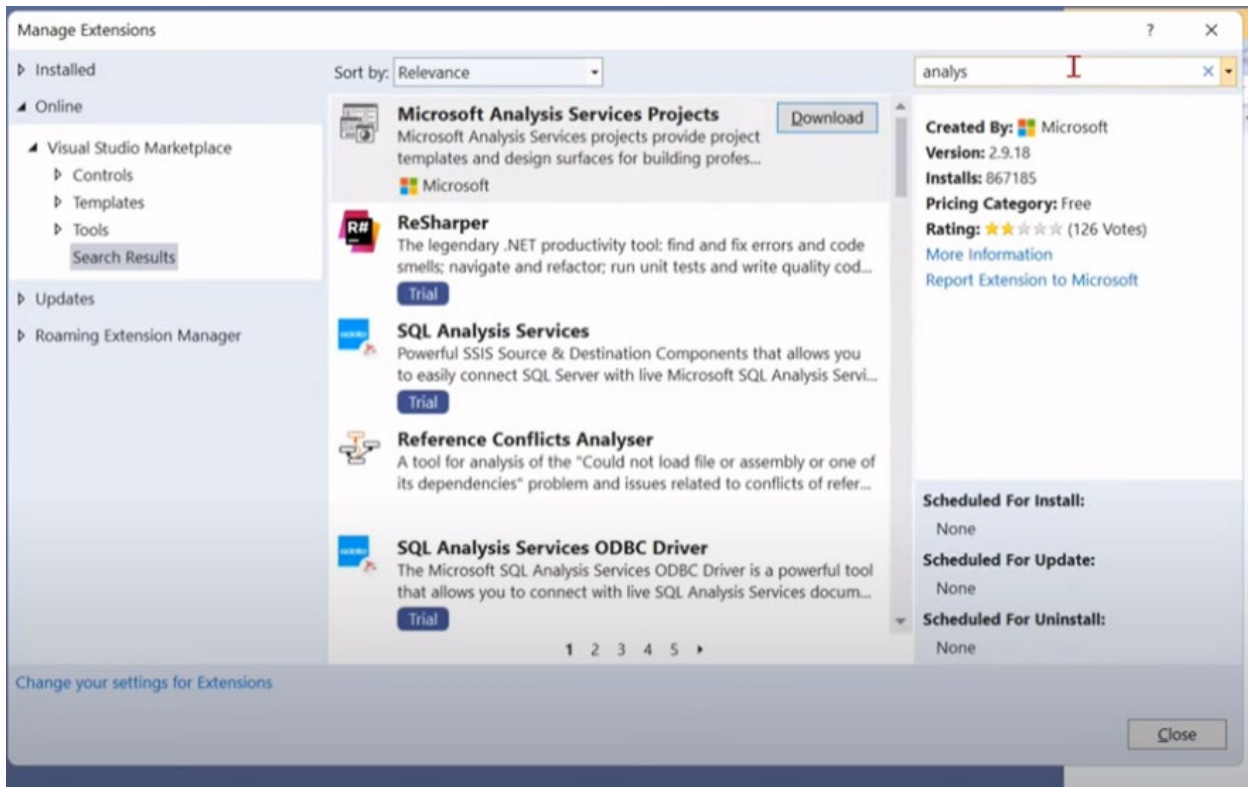


After you should search ssis then choose **SQL Server Integration Services Projects** and download it.

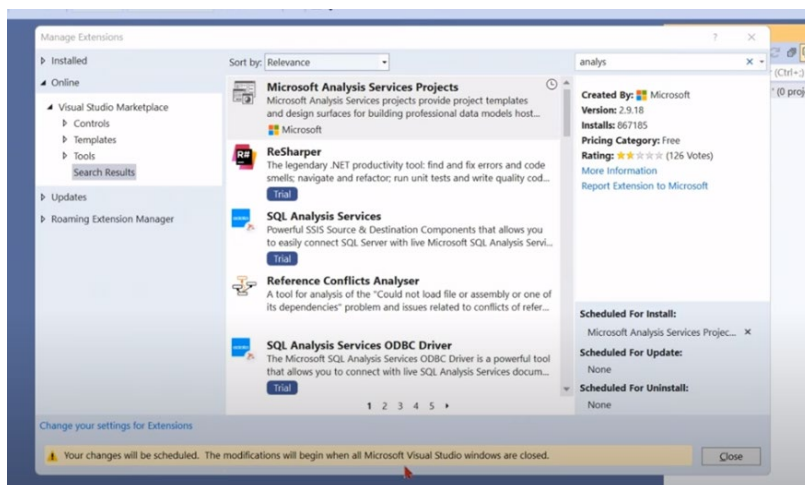
AS we have this file which I provide you . You may skip it.

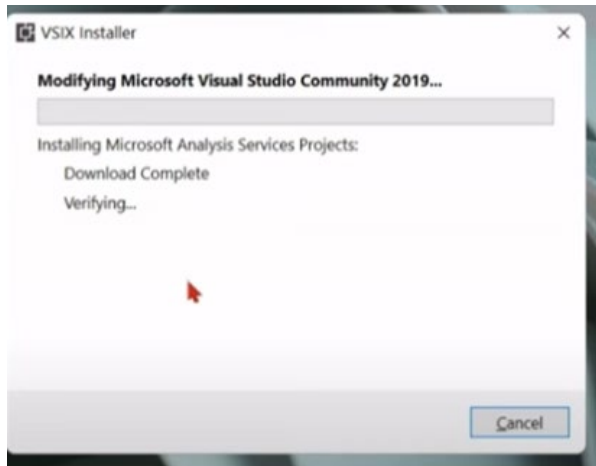


After that you should search analys then choose **Microsoft Analysis Services Projects** and download it.

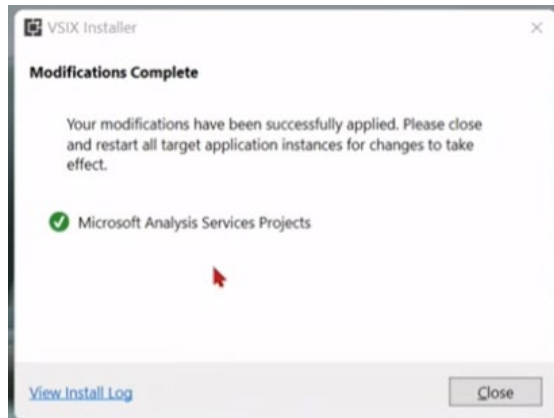
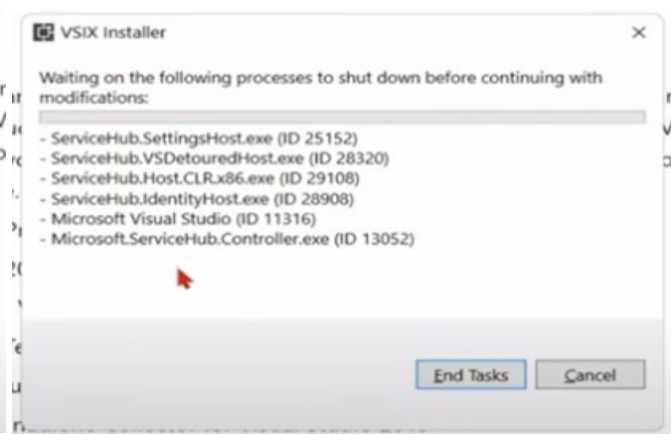
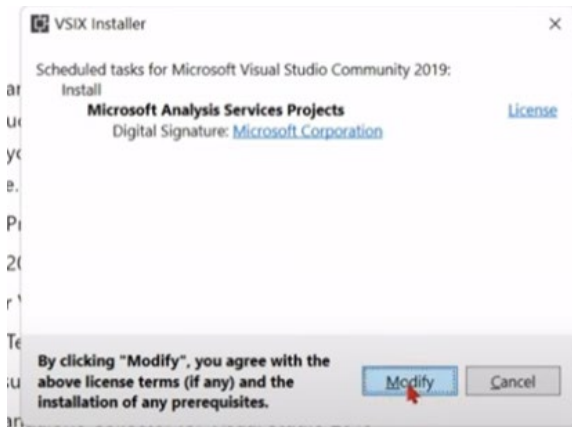
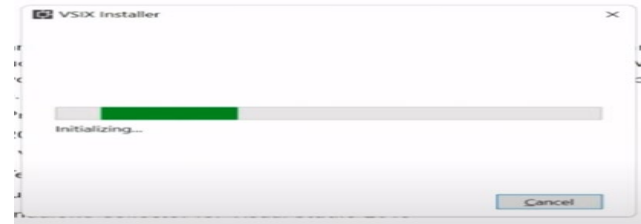


After complete download the Analysis tools you have to close visual studio.





then VSIX installer will install it.

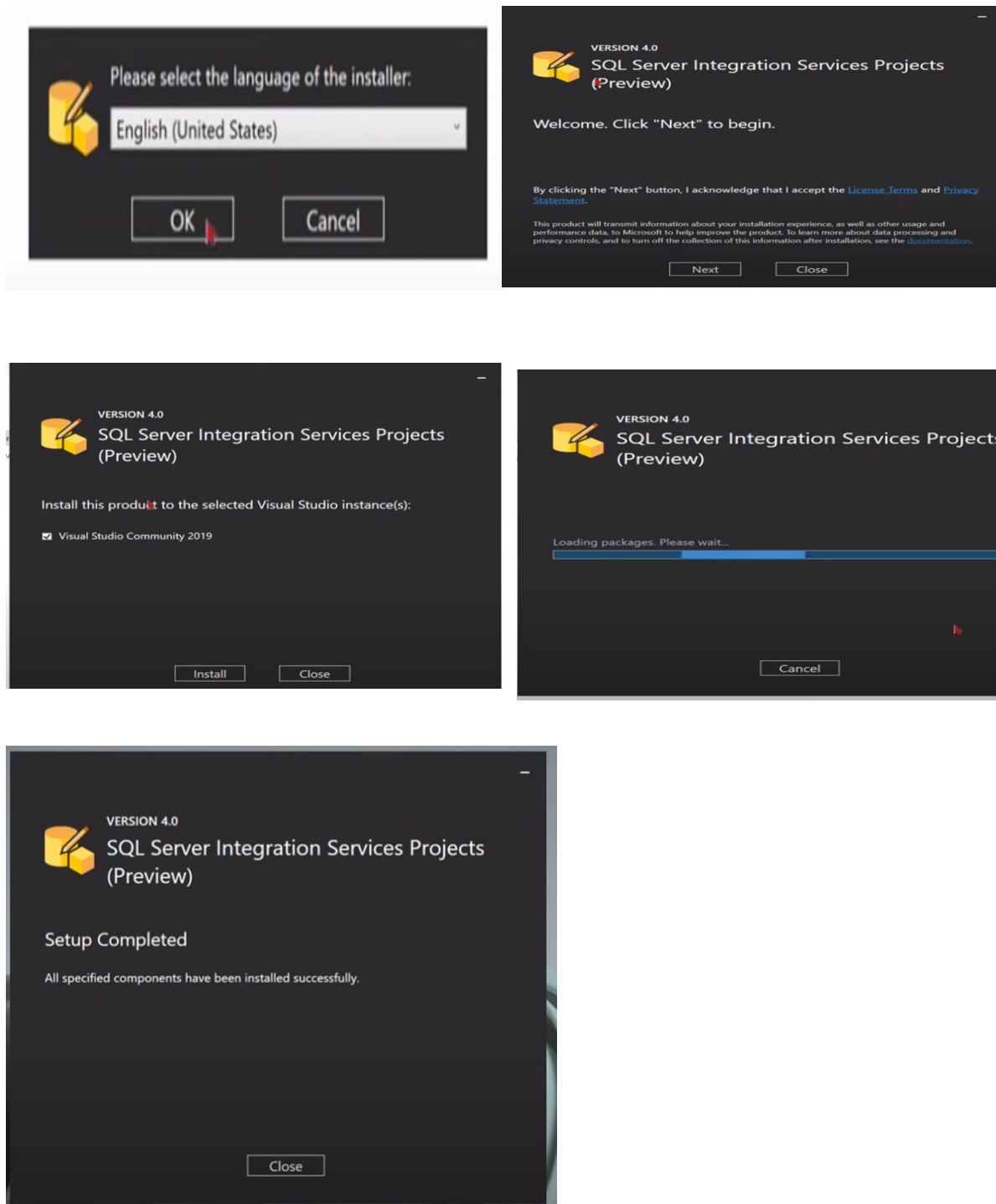


Now ssas is done now focus on ssis

↑

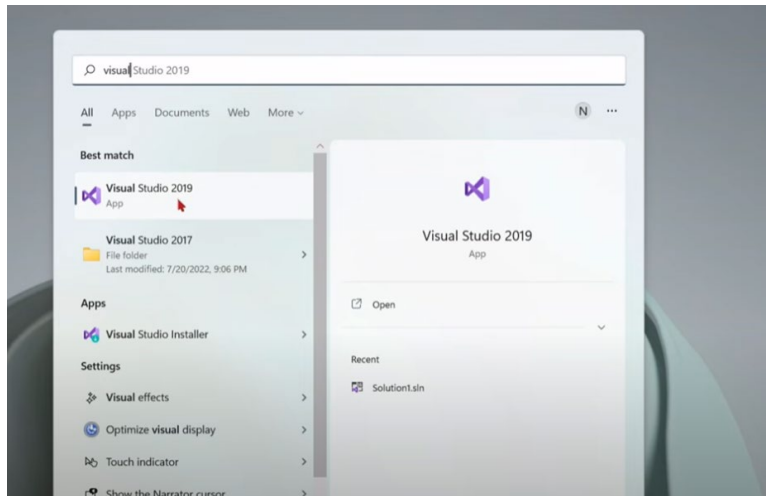
📁 This PC > Local Disk (D:) > Zihad > sql

Name	Date modified	Type	Size
📄 Microsoft.DataTools.IntegrationServices	2/22/2023 10:46 AM	Application	540,060 KB
📄 SQL2019-SSSI-Eval	2/22/2023 9:54 AM	Application	5,050 KB
📄 SSMS-Setup-ENU	2/22/2023 10:09 AM	Application	636,241 KB
📄 vs_community__97833001274241f58ad15...	2/22/2023 10:10 AM	Application	2,072 KB

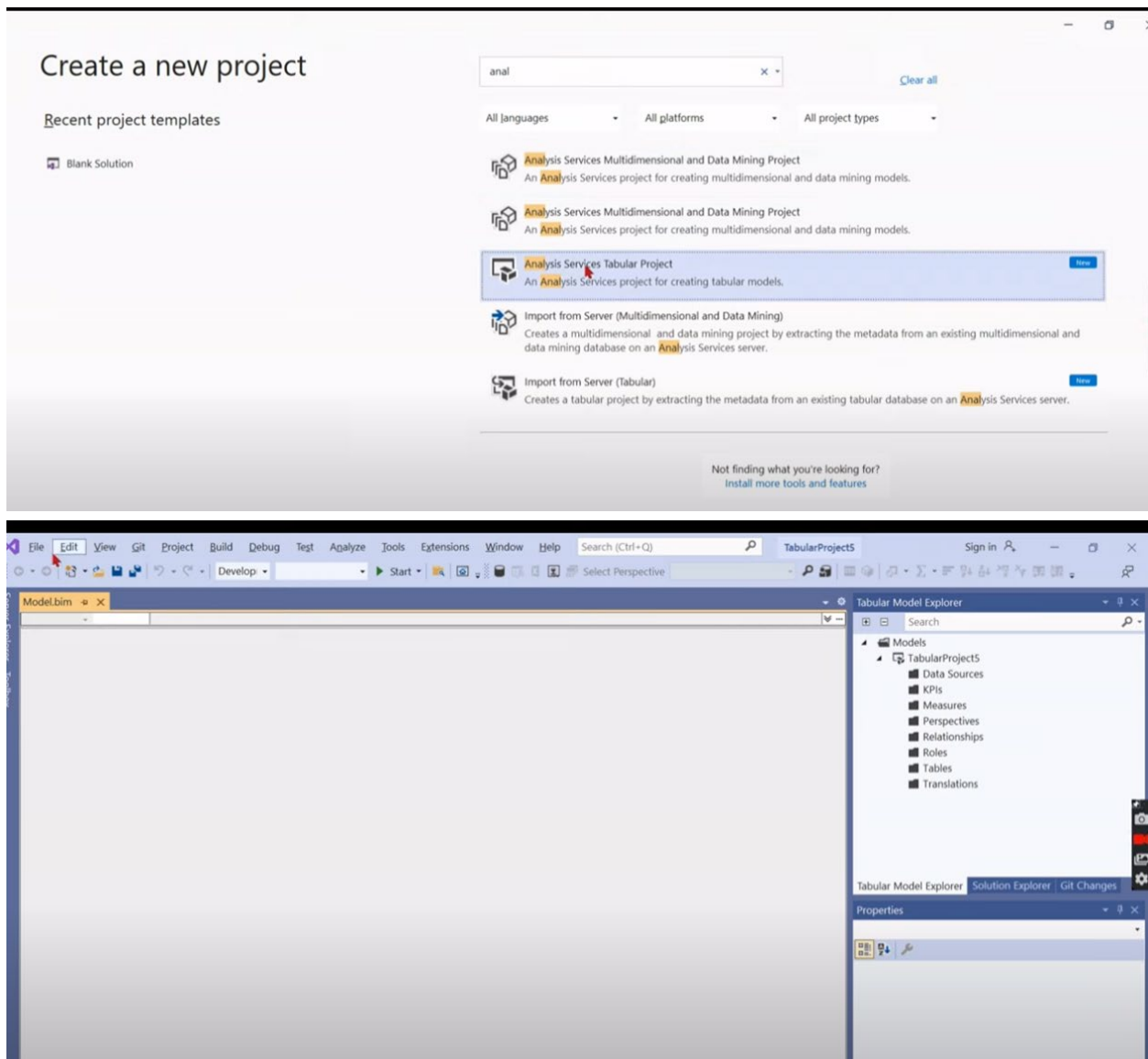


All the necessary things are installed successfully. So let's check them out.

Open visual studio



SSAS



SSIS

Create a new project

Recent project templates

- Analysis Services Tabular Project
- Blank Solution

Clear all

All languages All platforms All project types

Integration Services Project
This project may be used for building high performance data integration and workflow solutions that can be run on SSIS catalog, including extraction, transformation, and loading (ETL) operations for data warehousing.

Integration Services Project (Azure-Enabled)
This project may be used for building high performance data integration and workflow solutions that can also be run/ debugged on SSIS Platform-as-a-Service (PaaS) in Azure Data Factory.

Integration Services Import Project Wizard
A wizard that assists you in creating a new integration Services (SSIS) project that is based on an existing one. Import from a project deployment file (.ispac extension) or from an integration Services catalog on an instance of SQL Server.