



## INSTALLING LAB ENVIRONMENT ON WINDOWS

1

### Lab Environment

- > Python 3.11.6 (64-bit) for Windows



- > Jupyter Notebook



- > Visual Studio Code

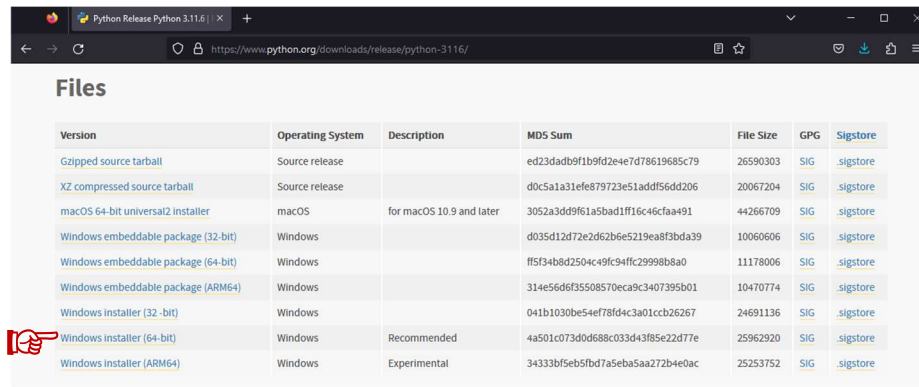


2

## Installing Python 3.11.6

> Download Python 3.11.6 for Windows OS

<https://www.python.org/downloads/release/python-3116/>



Version	Operating System	Description	MD5 Sum	File Size	PGP	Sigstore
Gzipped source tarball	Source release		ed23dadb9f1b9fd2e4e7d78619685c79	26590303	SIG	<a href="#">sigstore</a>
XZ compressed source tarball	Source release		d0c5a1a31efe879723e51addf56dd206	20067204	SIG	<a href="#">sigstore</a>
macOS 64-bit universal2 installer	macOS	for macOS 10.9 and later	3052a3dd9f61a5bad1ff16c46cfaa491	44286709	SIG	<a href="#">sigstore</a>
Windows embeddable package (32-bit)	Windows		d035d12d72e2d62b6e5219ea8f3bda39	10060606	SIG	<a href="#">sigstore</a>
Windows embeddable package (64-bit)	Windows		ff5f34b8d2504c49fc94ffc29998b8a0	11178006	SIG	<a href="#">sigstore</a>
Windows embeddable package (ARM64)	Windows		314e56d6f35508570eca9c3407395b01	10470774	SIG	<a href="#">sigstore</a>
Windows installer (32-bit)	Windows		041b1030be54ef78fd4c3a01ccb26267	24691136	SIG	<a href="#">sigstore</a>
Windows installer (64-bit)	Windows	Recommended	4a501c073d0d688c03d43f85e22d77e	25962920	SIG	<a href="#">sigstore</a>
Windows installer (ARM64)	Windows	Experimental	34333bf5eb5fbd7a5eba5aa272b4e0ac	25253752	SIG	<a href="#">sigstore</a>

<https://www.python.org/ftp/python/3.11.6/python-3.11.6-amd64.exe>

3

## Installing Python 3.11.6

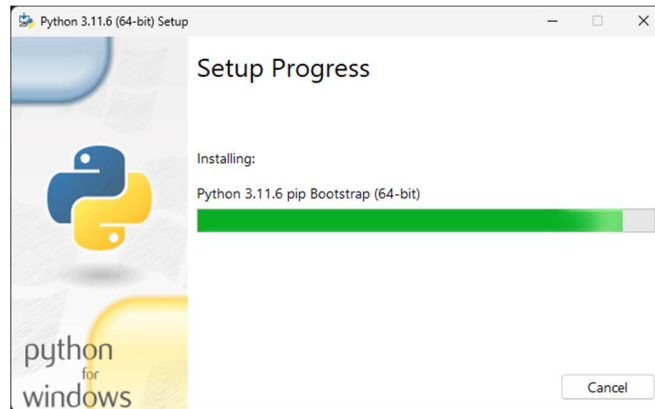
> Download Python 3.11.6 for Windows OS



4

## Installing Python 3.11.6

> Download Python 3.11.6 for Windows OS



5

## Update pip and setuptools

> Open Windows Command Line Prompt. Press **Windows+R** to open "Run" box. Type **"cmd"** and then click **"OK"**. Type commands below.

> **python --version**

Python 3.11.6

> **python -m pip install --upgrade pip setuptools**

Collecting setuptools

Obtaining dependency information for setuptools from  
<https://files.pythonhosted.org/packages/bb/26/7945080113158354380a12ce26873dd6c1e/bd88d47f5bc24e2c5bb38c16a/setuptools-68.2.2-py3-none-any.whl.metadata>

Downloading setuptools-68.2.2-py3-none-any.whl.metadata (6.3 kB)

Downloading setuptools-68.2.2-py3-none-any.whl (807 kB)

---

807.9/807.9 kB 1.8 MB/s eta 0:00:00

Installing collected packages: setuptools

Attempting uninstall: setuptools

Found existing installation: setuptools 65.5.0

Uninstalling setuptools-65.5.0:

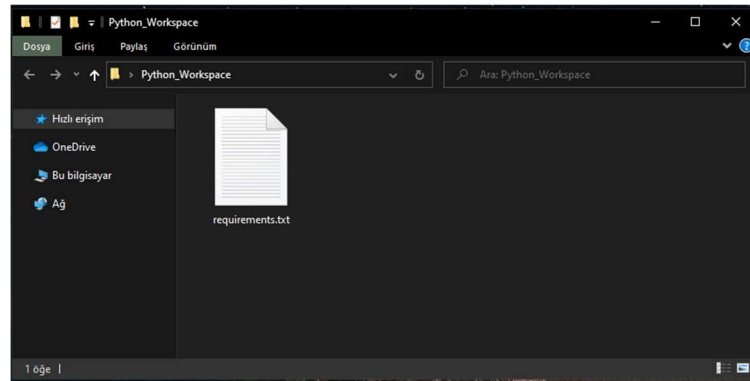
Successfully uninstalled setuptools-65.5.0

Successfully installed setuptools-68.2.2

6

## Installing Dependencies

Create `"Python_Workspace"` directory on your desktop and download `"requirements.txt"` file to `"Python_Workspace"`.



7

## Installing Dependencies

Open Windows Command Prompt and change directory to `"Python_Workspace"` path.

```
> cd %HOMEPATH%\Desktop\Python_Workspace
```



8

## Installing Dependencies

Then install these requirements

```
> pip install --upgrade -r requirements.txt
```

9

## Running Jupyter Lab



```
> jupyter lab
```

```
[I 2023-10-15 15:23:32.105 ServerApp] Serving notebooks from local directory: C:\Users\DCL-Course\Desktop\Python_Workspace
[I 2023-10-15 15:23:32.105 ServerApp] Jupyter Server 2.7.3 is running at:
[I 2023-10-15 15:23:32.105 ServerApp] http://localhost:8888/lab?token=a98e60ab9f87e41521bbc896d92d81add5b6f0fb83ea7517
[I 2023-10-15 15:23:32.105 ServerApp] http://127.0.0.1:8888/lab?token=a98e60ab9f87e41521bbc896d92d81add5b6f0fb83ea7517
[I 2023-10-15 15:23:32.105 ServerApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 2023-10-15 15:23:32.134 ServerApp]
```

To access the server, open this file in a browser:

```
file:///C:/Users/DCL-Course/AppData/Roaming/jupyter/runtime/jpserver-7624-open.html
```

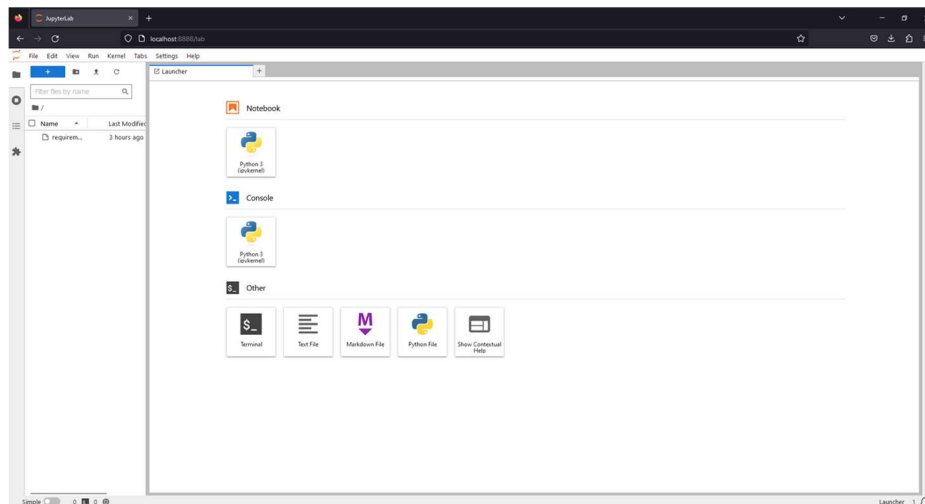
Or copy and paste one of these URLs:

```
http://localhost:8888/lab?token=a98e60ab9f87e41521bbc896d92d81add5b6f0fb83ea7517
```

```
http://127.0.0.1:8888/lab?token=a98e60ab9f87e41521bbc896d92d81add5b6f0fb83ea7517
```

10

## Running Jupyter Lab

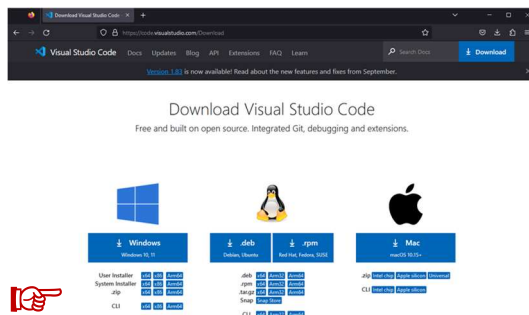


11

## Installing Visual Studio Code

> Download Visual Studio Code for Windows OS

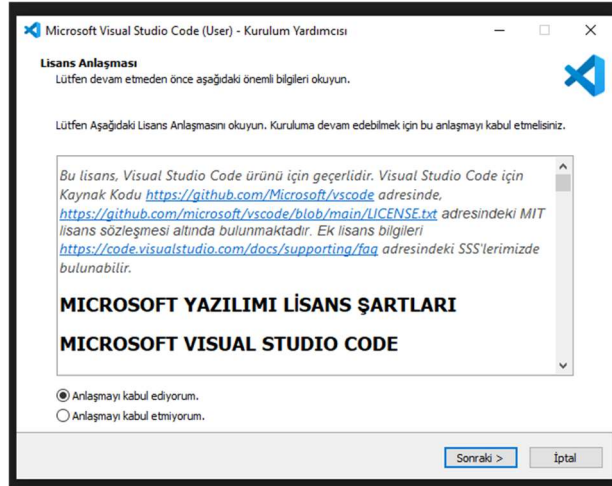
<https://code.visualstudio.com/download>



<https://az764295.vo.msecnd.net/stable/f1b07bd25dfad64b0167beb15359ae573aec2cc/VSCodeUserSetup-x64-1.83.1.exe>

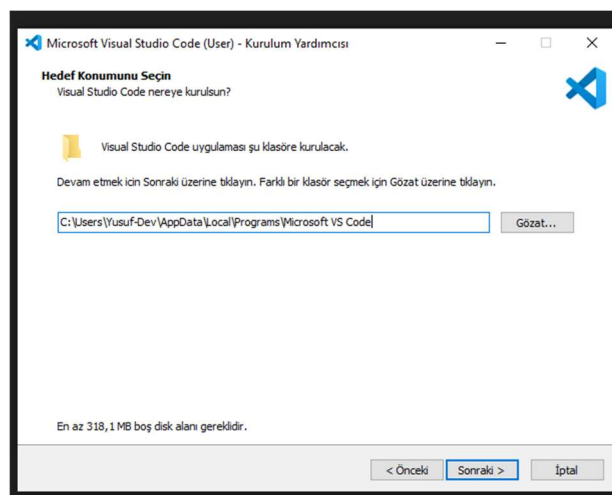
12

## Installing Visual Studio Code



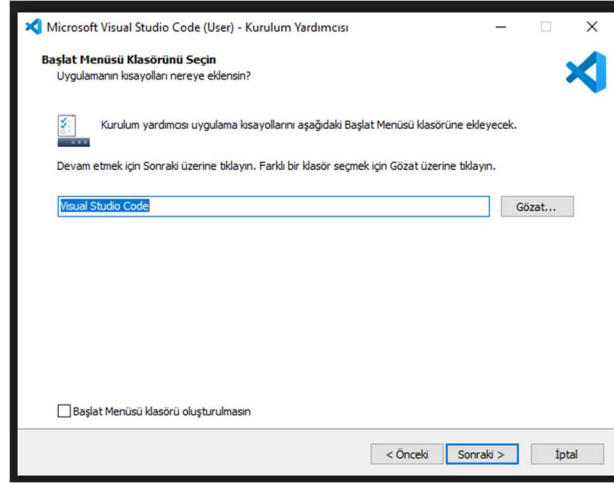
13

## Installing Visual Studio Code



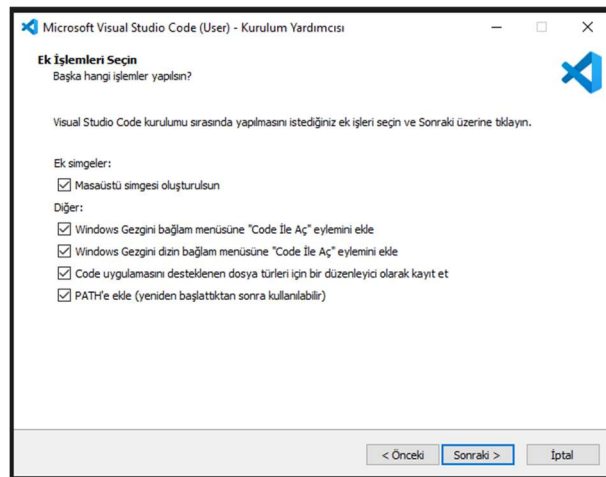
14

## Installing Visual Studio Code



15

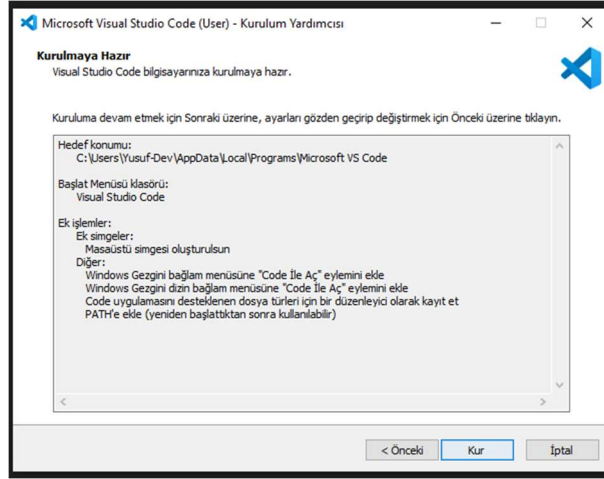
## Installing Visual Studio Code



16

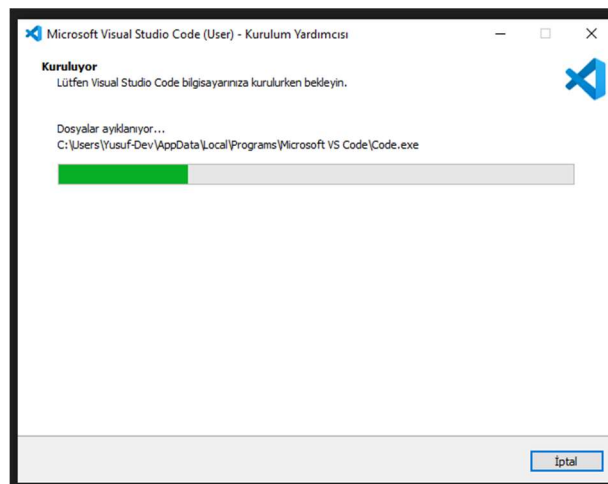


## Installing Visual Studio Code



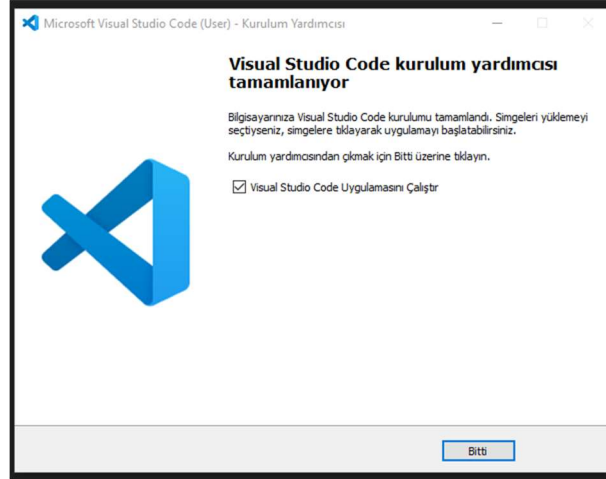
17

## Installing Visual Studio Code



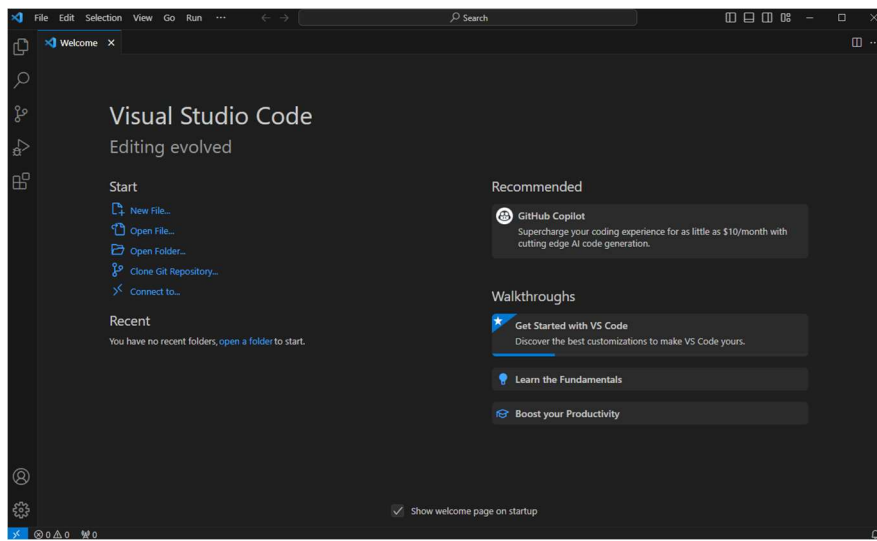
18

## Installing Visual Studio Code



19

## Installing Visual Studio Code



20

## Installing Visual Studio Code

- > Go to VSCode extensions tab and install **Python**, **Pylance** and **Jupyter** extensions in order.

