

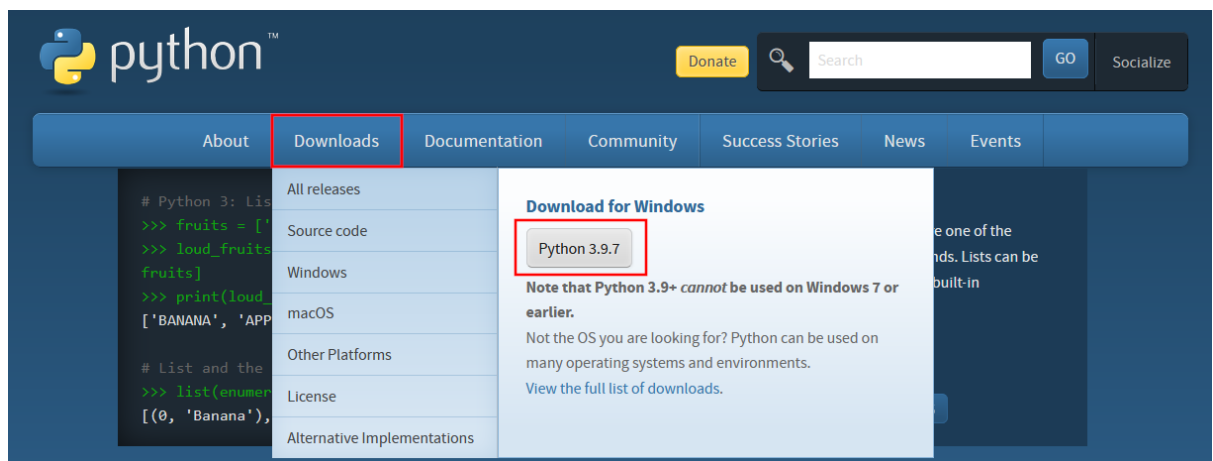
JupyterLab Installation on Windows

Note: Installation steps assume that you have administrator rights on your system. If you don't have administrator rights, follow the steps without selecting "for all users" options and install software packages to your user account only.

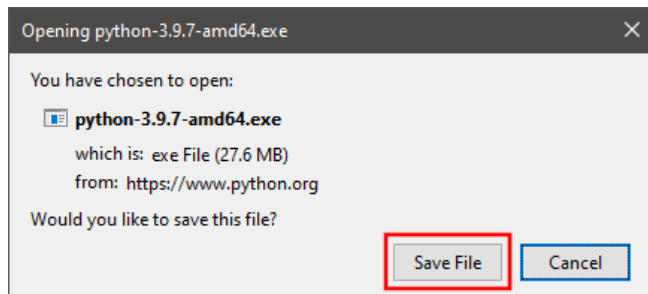
Install Python

Skip this step if you have Python 3.x already installed on your system.

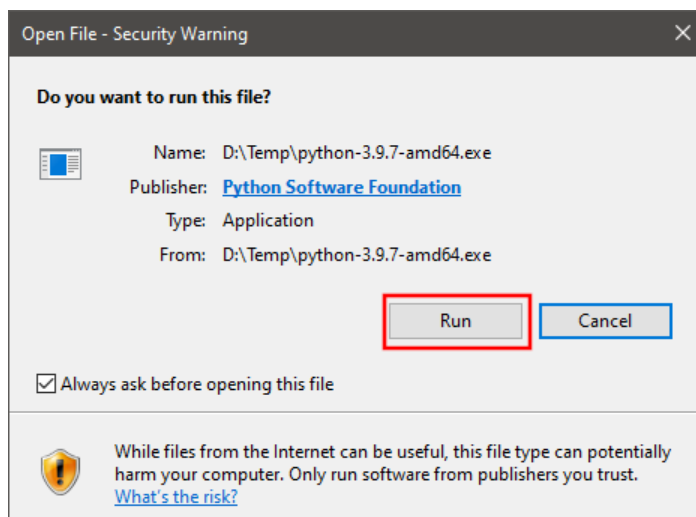
1. Open your web browser and go to <https://www.python.org/>
2. Click **Downloads** on the top menu and click **Python 3.9.7** button.



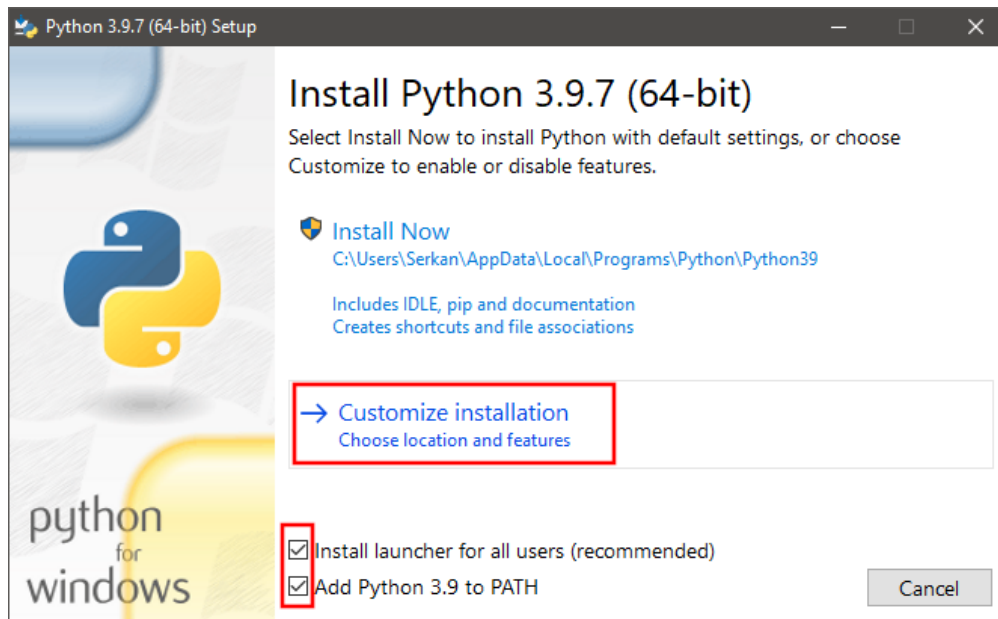
3. Save installation file.



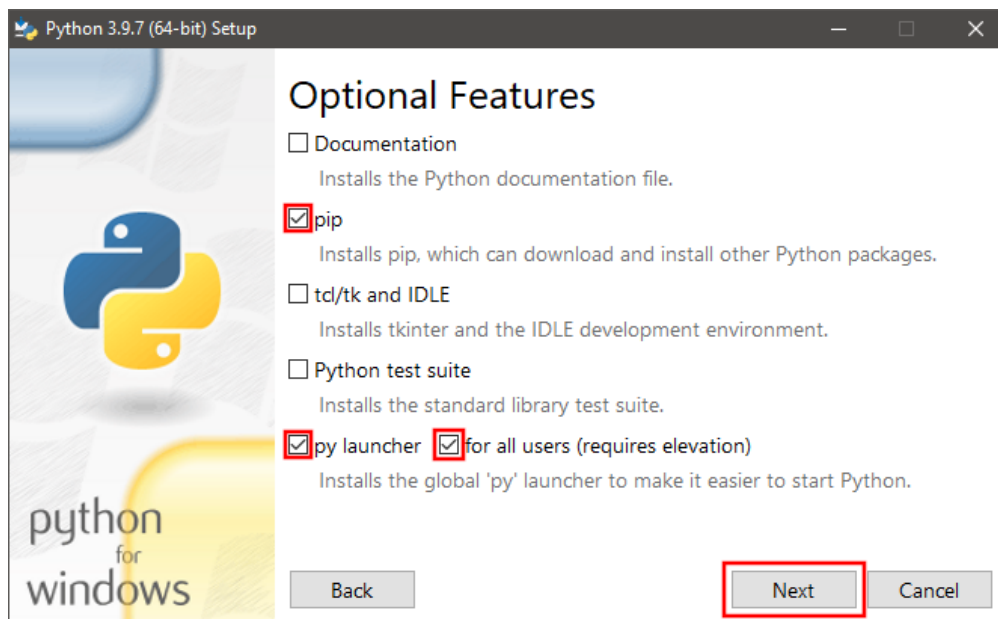
4. Run installation file.



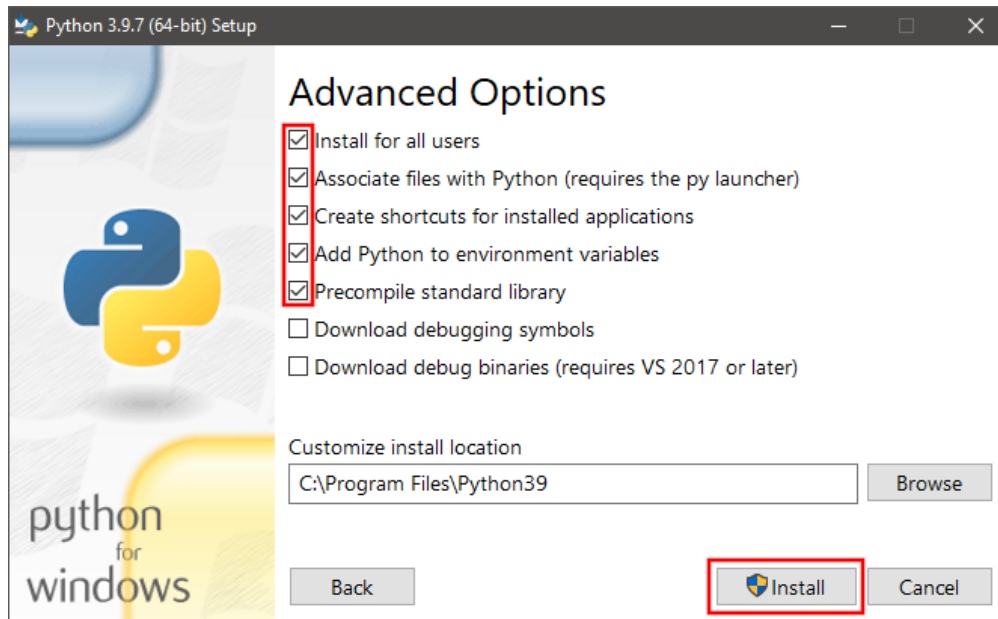
5. You can choose **Install Now** option to complete installation with default options. For the suggested custom installation please follow steps 6 – 8.
6. Check *Install launcher for all users* and *Add Python 3.9 to PATH* boxes. Click **Customize Installation**.



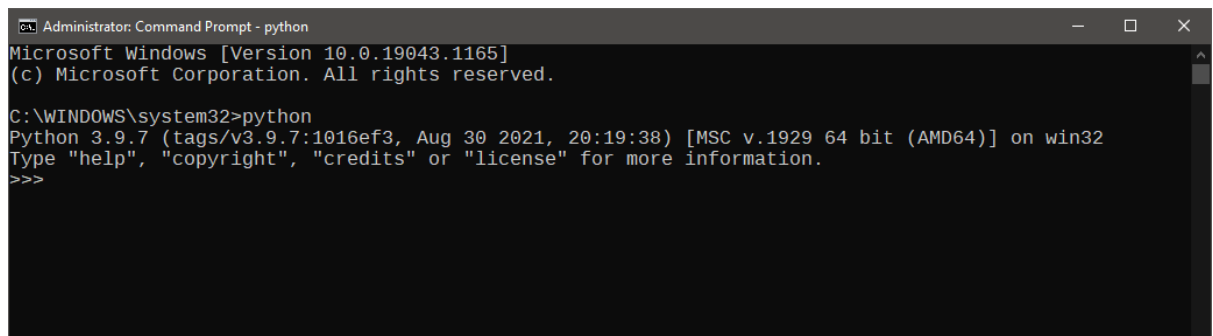
7. Uncheck *Documentation*, *tk/tk and IDLE*, and *Python test suite* options. Check *pip*, *py launcher*, and *for all users* options. Click **Next**.



8. Check *Install for all users*, *Associate files with Python*, *Create shortcuts for installed applications*, *Add Python to environment variables*, and *Precompile standard library* options. Uncheck *Download debugging symbols* and *Download debug binaries* options. Click **Install**.



9. Once installation is finished, open a command prompt and test Python by entering **python** command. Python command line interface should be available with **>>>** prompt.



Install node.js

Skip this step if you have node.js 14.x or newer already installed on your system.

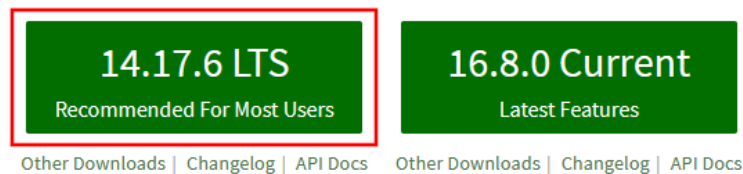
Node.js is not required for the basic JupyterLab installation, but it is required for many extensions. Therefore, it is highly recommended that you install it.

1. Open your web browser and go to <https://nodejs.org/en/>
2. Click LTS (Long Term Support) version **download** button.

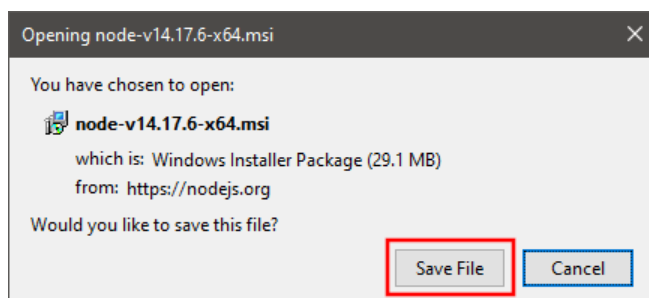
Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine.

New security releases now available for 14.x, and 12.x release lines

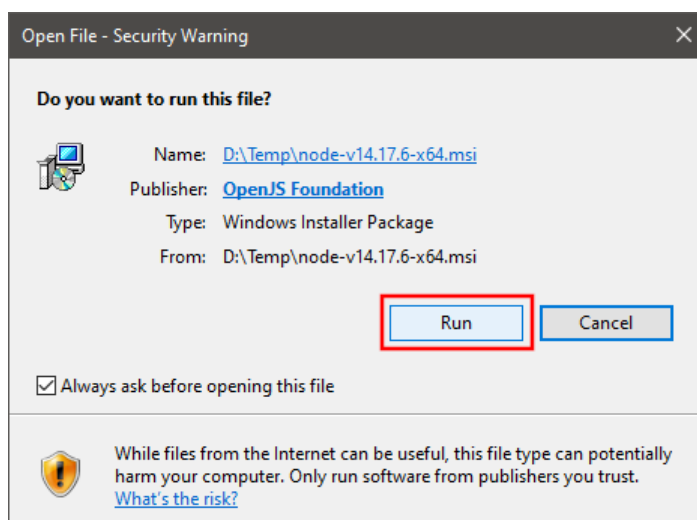
Download for Windows (x64)



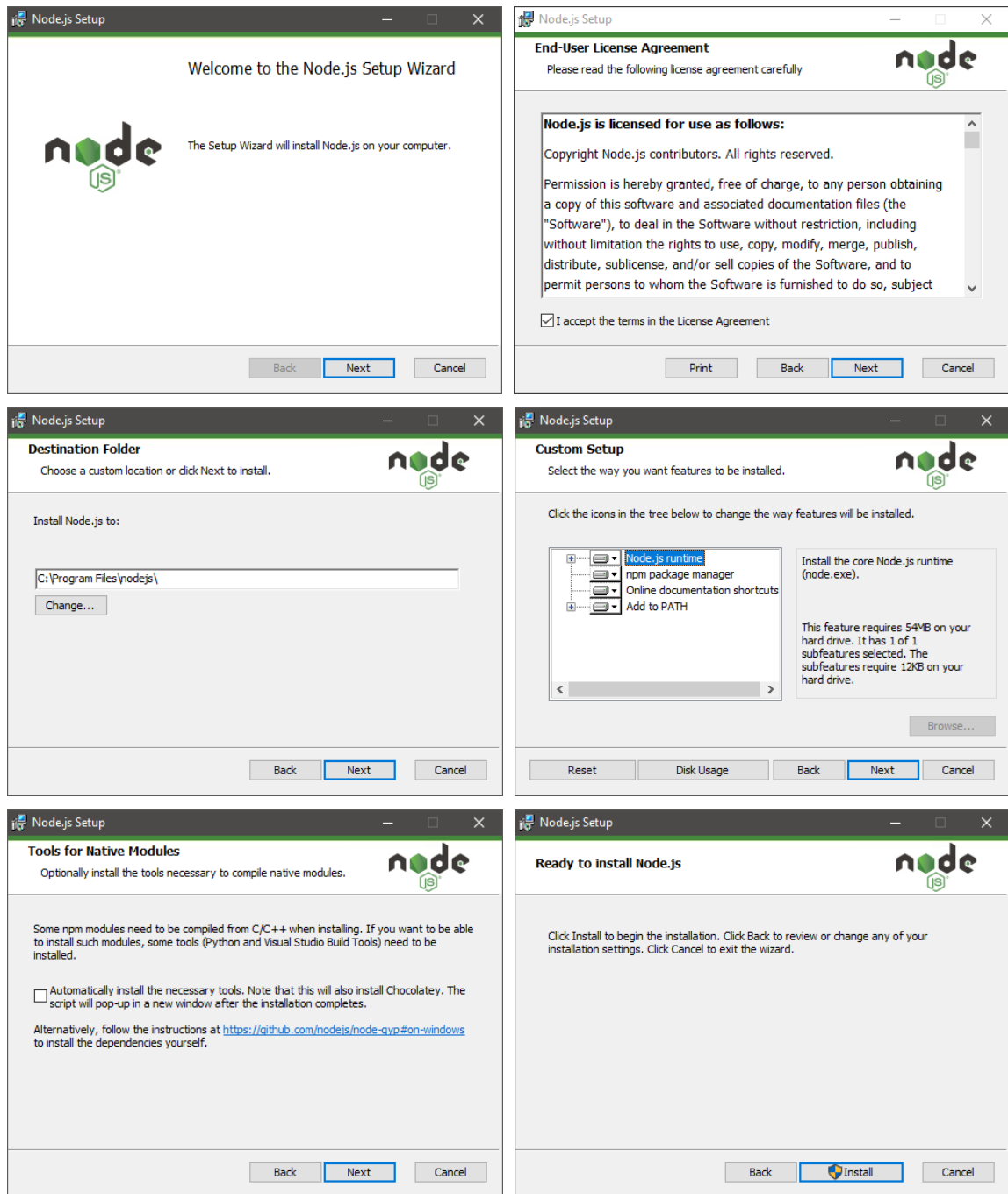
3. Save installation file.



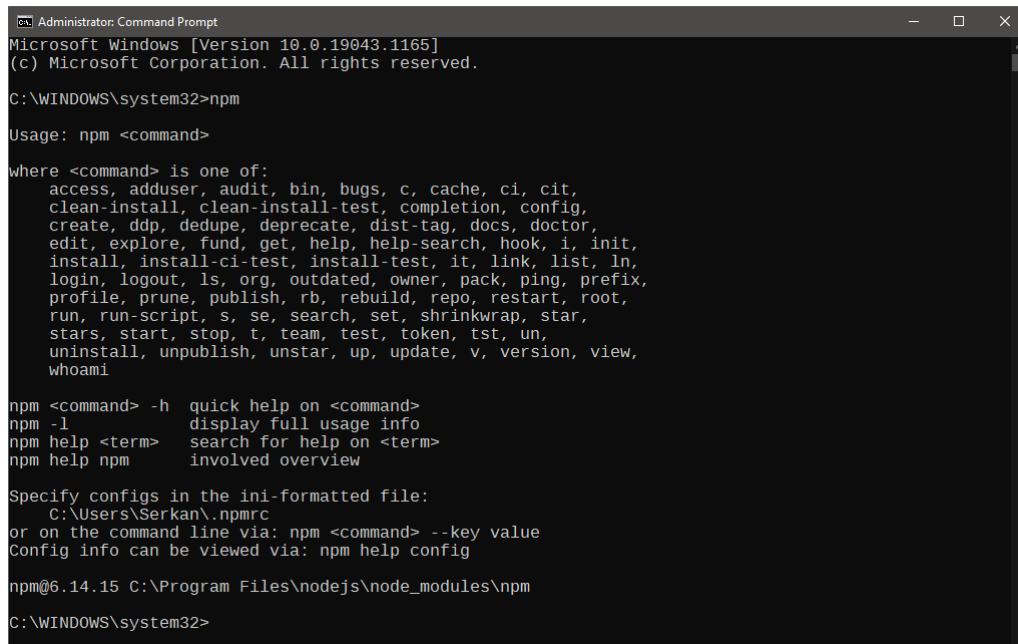
4. Run installation file.



5. Complete installation by following the wizard accepting the terms and the default options.



6. Once installation is finished, open a command prompt and test node.js by entering **npm** command. Help on its usage should be displayed.



```
Administrator: Command Prompt
Microsoft Windows [Version 10.0.19043.1165]
(c) Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>npm

Usage: npm <command>

where <command> is one of:
  access, adduser, audit, bin, bugs, c, cache, ci, cit,
  clean-install, clean-install-test, completion, config,
  create, ddp, dedupe, deprecate, dist-tag, docs, doctor,
  edit, explore, fund, get, help, help-search, hook, i, init,
  install, install-ci-test, install-test, it, link, list, ln,
  login, logout, ls, org, outdated, owner, pack, ping, prefix,
  profile, prune, publish, rb, rebuild, repo, restart, root,
  run, run-script, s, se, search, set, shrinkwrap, star,
  stars, start, stop, t, team, test, token, tst, un,
  uninstall, unpublish, unstar, up, update, v, version, view,
  whoami

npm <command> -h  quick help on <command>
npm -l           display full usage info
npm help <term>  search for help on <term>
npm help npm     involved overview

Specify configs in the ini-formatted file:
  C:\Users\Serkan\.npmrc
or on the command line via: npm <command> --key value
Config info can be viewed via: npm help config

npm@6.14.15 C:\Program Files\nodejs\node_modules\npm
C:\WINDOWS\system32>
```

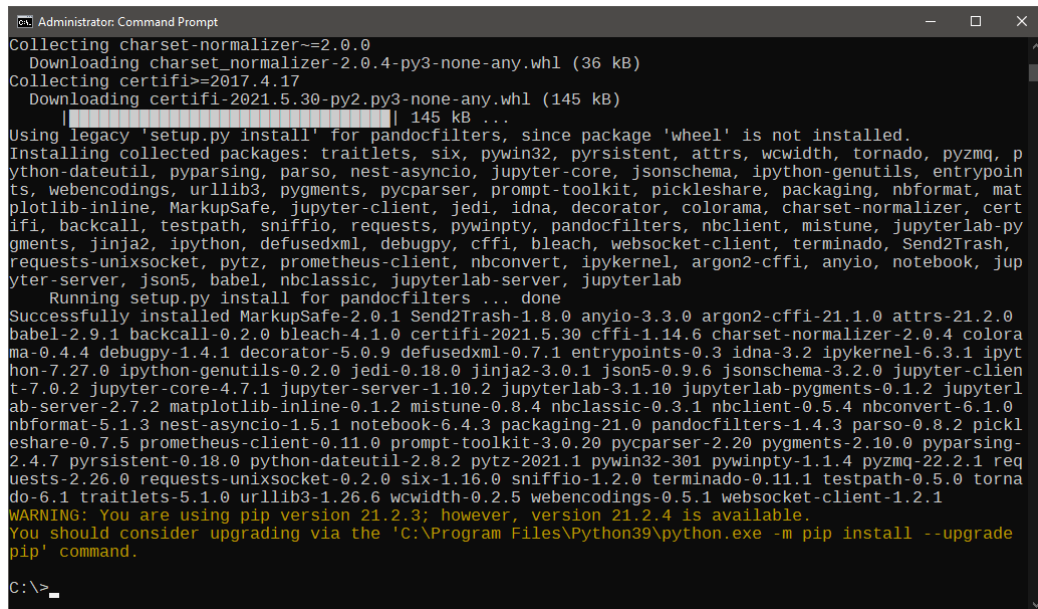
Install JupyterLab

1. Open a command prompt and enter **pip install jupyterlab** command.



```
Administrator: Command Prompt
C:\>pip install jupyterlab
```

2. Python package manager (pip) will install JupyterLab and all other required packages.



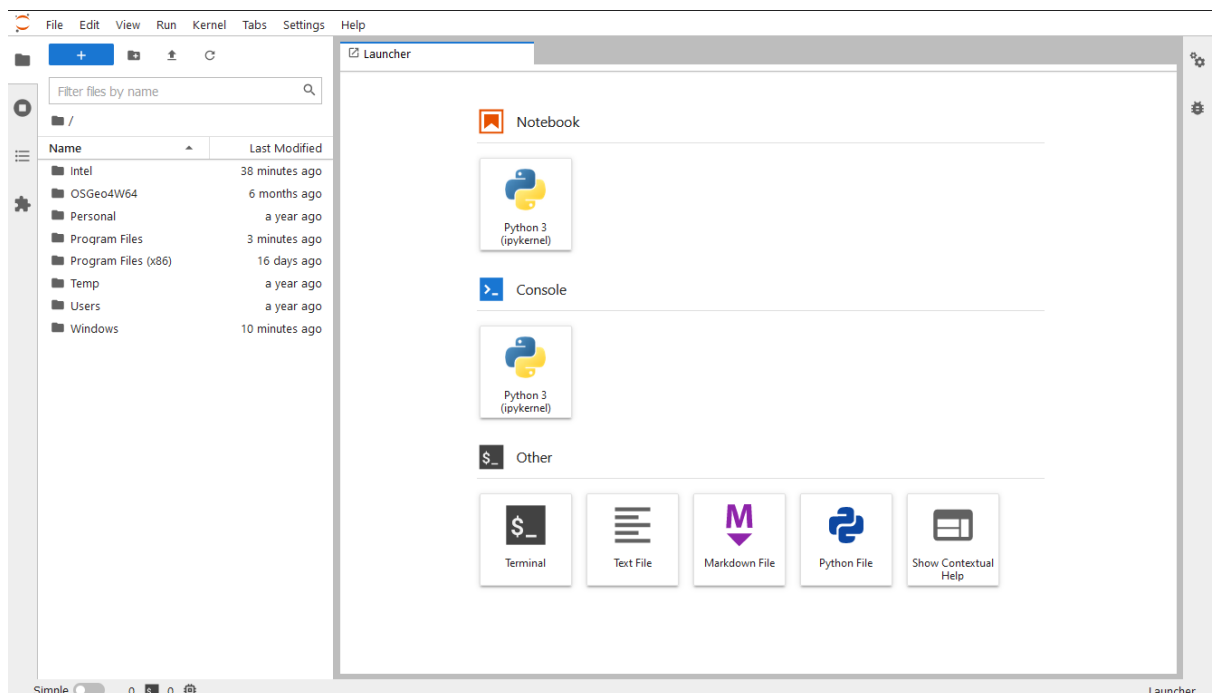
```
Administrator: Command Prompt
Collecting charset-normalizer==2.0.0
  Downloading charset_normalizer-2.0.4-py3-none-any.whl (36 kB)
Collecting certifi==2017.4.17
  Downloading certifi-2021.5.30-py2.py3-none-any.whl (145 kB)
  |#####| 145 kB ...
Using legacy 'setup.py install' for pandocfilters, since package 'wheel' is not installed.
Installing collected packages: traitlets, six, pywin32, pyrsistent, attrs, wcwidth, tornado, pyzmq, python-dateutil, pyparsing, parso, nest-asyncio, jupyter-core, jsonschema, ipython-genutils, entrypoints, webencodings, urllib3, pygments, pycparser, prompt-toolkit, pickleshare, packaging, nbformat, matplotlib-inline, MarkupSafe, jupyter-client, jedi, idna, decorator, colorama, charset-normalizer, certifi, backcall, testpath, sniffio, requests, pywinpty, pandocfilters, nbclient, mistune, jupyterlab-pygments, Jinja2, ipython, defusedxml, debugpy, cffi, bleach, websocket-client, terminado, Send2Trash, requests-unixsocket, pytz, prometheus-client, nbconvert, ipykernel, argon2-cffi, anyio, notebook, jupyter-server, json5, babel, nbclassic, jupyterlab-server, jupyterlab
Running setup.py install for pandocfilters ... done
Successfully installed MarkupSafe-2.0.1 Send2Trash-1.8.0 anyio-3.3.0 argon2-cffi-21.1.0 attrs-21.2.0 babel-2.9.1 backcall-0.2.0 bleach-4.1.0 certifi-2021.5.30 cffi-1.14.6 charset-normalizer-2.0.4 colorama-0.4.4 debugpy-1.4.1 decorator-5.0.9 defusedxml-0.7.1 entrypoints-0.3 idna-3.2 ipykernel-6.3.1 ipython-7.27.0 ipython-genutils-0.2.0 jedi-0.18.0 Jinja2-3.0.1 json5-0.9.6 jsonschema-3.2.0 jupyter-client-7.0.2 jupyter-core-4.7.1 jupyter-server-1.10.2 jupyterlab-3.1.10 jupyterlab-pygments-0.1.2 jupyterlab-server-2.7.2 matplotlib-inline-0.1.2 mistune-0.8.4 nbclassic-0.3.1 nbclient-0.5.4 nbconvert-6.1.0 nbformat-5.1.3 nest-asyncio-1.5.1 notebook-6.4.3 packaging-21.0 pandocfilters-1.4.3 parso-0.8.2 pickleshare-0.7.5 prometheus-client-0.11.0 prompt-toolkit-3.0.20 pycparser-2.20 pygments-2.10.0 pyparsing-2.4.7 pyrsistent-0.18.0 python-dateutil-2.8.2 pytz-2021.1 pywin32-301 pywinpty-1.1.4 pyzmq-22.2.1 requests-2.26.0 requests-unixsocket-0.2.0 six-1.16.0 sniffio-1.2.0 terminado-0.11.1 testpath-0.5.0 tornado-6.1 traitlets-5.1.0 urllib3-1.26.6 wcwidth-0.2.5 webencodings-0.5.1 websocket-client-1.2.1
WARNING: You are using pip version 21.2.3; however, version 21.2.4 is available.
You should consider upgrading via the 'C:\Program Files\Python39\python.exe -m pip install --upgrade pip' command.
C:\>_
```

3. Once installation is finished, enter **jupyter lab** command to start JupyterLab.



```
Administrator: Command Prompt
C:\>jupyter lab_
```

4. By default, JupyterLab automatically opens a web browser tab to display the user interface.



- JupyterLab will also display some information on the terminal, including the URL address to access the user interface. You can **copy-paste the URL address** to your web browser to access the user interface if it is not displayed automatically.

```
C:\>jupyter lab
[I 2021-09-06 09:22:36.001 ServerApp] jupyterlab | extension was successfully linked.
[W 2021-09-06 09:22:36.028 ServerApp] The 'min_open_files_limit' trait of a ServerApp instance expected an int, not the NoneType None.
[I 2021-09-06 09:22:36.305 ServerApp] nbclassic | extension was successfully loaded.
[I 2021-09-06 09:22:36.306 LabApp] JupyterLab extension loaded from C:\Program Files\Python39\lib\site-packages\jupyterlab
[I 2021-09-06 09:22:36.306 LabApp] JupyterLab application directory is C:\Program Files\Python39\share\jupyter\lab
[I 2021-09-06 09:22:36.309 ServerApp] jupyterlab | extension was successfully loaded.
[I 2021-09-06 09:22:36.310 ServerApp] Serving notebooks from local directory: C:\
[I 2021-09-06 09:22:36.310 ServerApp] Jupyter Server 1.10.2 is running at:
[I 2021-09-06 09:22:36.310 ServerApp] http://localhost:8888/lab?token=2afecc7421d6db3c27c6d75319477d88de62b6abd79b0fc5
[I 2021-09-06 09:22:36.310 ServerApp] or http://127.0.0.1:8888/lab?token=2afecc7421d6db3c27c6d75319477d88de62b6abd79b0fc5
[I 2021-09-06 09:22:36.310 ServerApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 2021-09-06 09:22:36.388 ServerApp]

To access the server, open this file in a browser:
file:///C:/Users/Serkan/AppData/Roaming/jupyter/runtime/jpserver-10936-open.html
Or copy and paste one of these URLs:
http://localhost:8888/lab?token=2afecc7421d6db3c27c6d75319477d88de62b6abd79b0fc5
or http://127.0.0.1:8888/lab?token=2afecc7421d6db3c27c6d75319477d88de62b6abd79b0fc5
[W 2021-09-06 09:22:40.380 LabApp] Could not determine jupyterlab build status without nodejs
C:\Program Files\Python39\lib\json\encoder.py:257: UserWarning: date_default is deprecated since jupyter_client 7.0.0. Use jupyter_client.jsonutil.json_default.
return _iterencode(o, 0)
```

- Enjoy your JupyterLab!