Praktikum 1 – Machine Learning
Instalasi Jupyter Notebook

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Diah Ayu Puspasari

Tujuan : Menginstall Jupyter Notebook menggunakan Anaconda & Python Pip

Dateline : 1 Pekan

Gitlab/Github :

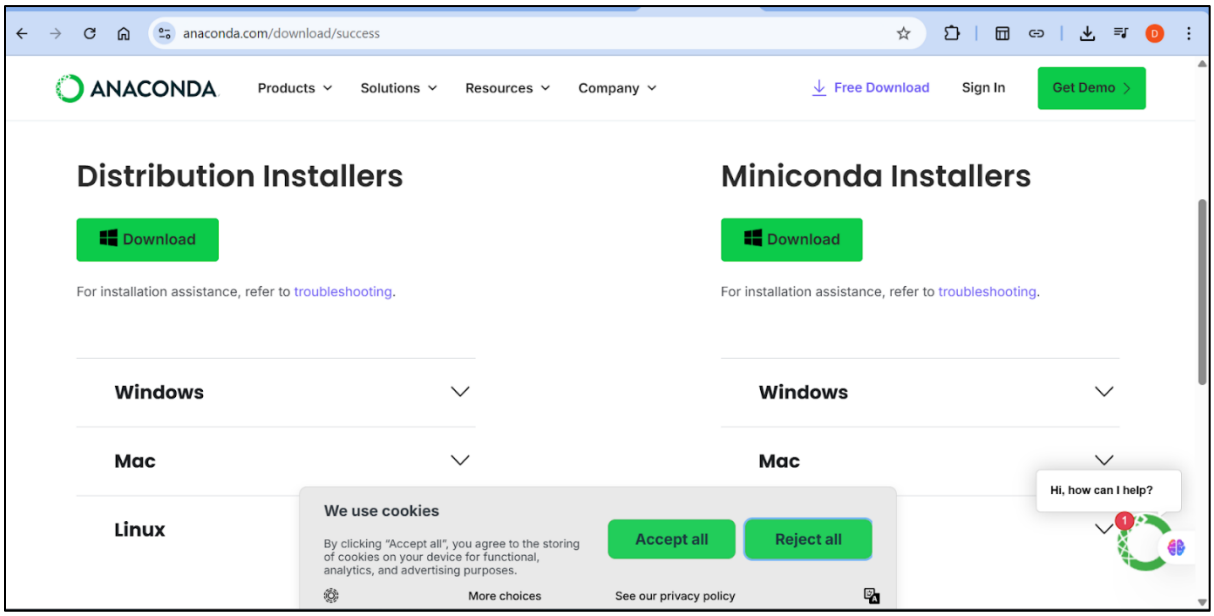
Branch Repository : [PRODI ROMBEL]_[NAMASINGKAT]_[NIM] (contoh: ti01_budi_0110112001)

Aturan Pengerjaan:

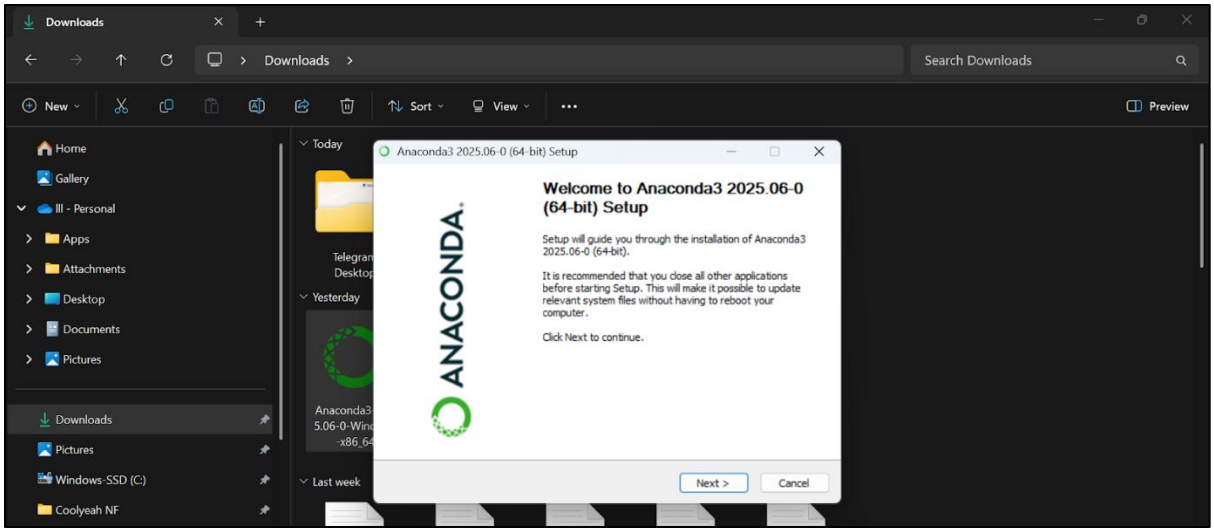
1. Gunakan text editor yang nyaman bagi anda
2. Diperkenankan mengerjakan langsung bagi yang sudah memahami dan menguasai materi
3. Dilarang melakukan tindakan plagiarism (asisten lab akan mengecek hasil pekerjaan)
    a. 1x nilai praktikum terkait bernilai 0
    b. 2x nilai matakuliah pemrograman web E
    c. 3x mahasiswa akan di sidang komite etik kampus

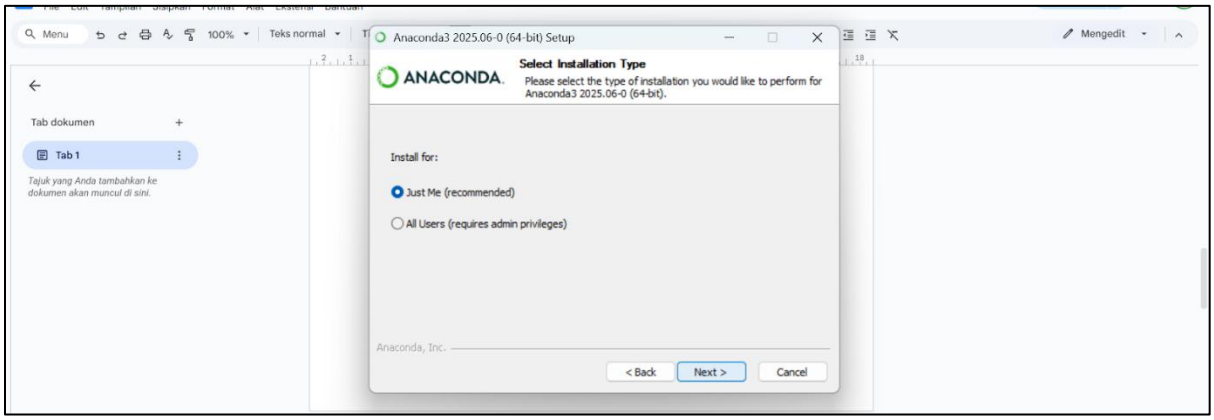
Tutorial Install Jupyter dengan Anaconda

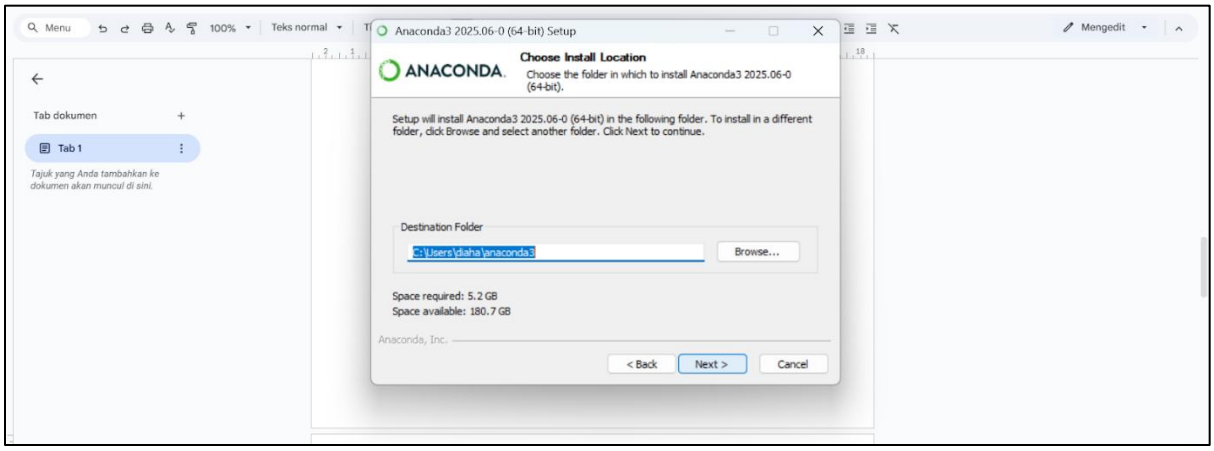
1. Download Anaconda
    a. Buka: https://www.anaconda.com/download
    b. Pilih sesuai sistem operasi (Windows/Mac/Linux) dan arsitektur (64-bit).

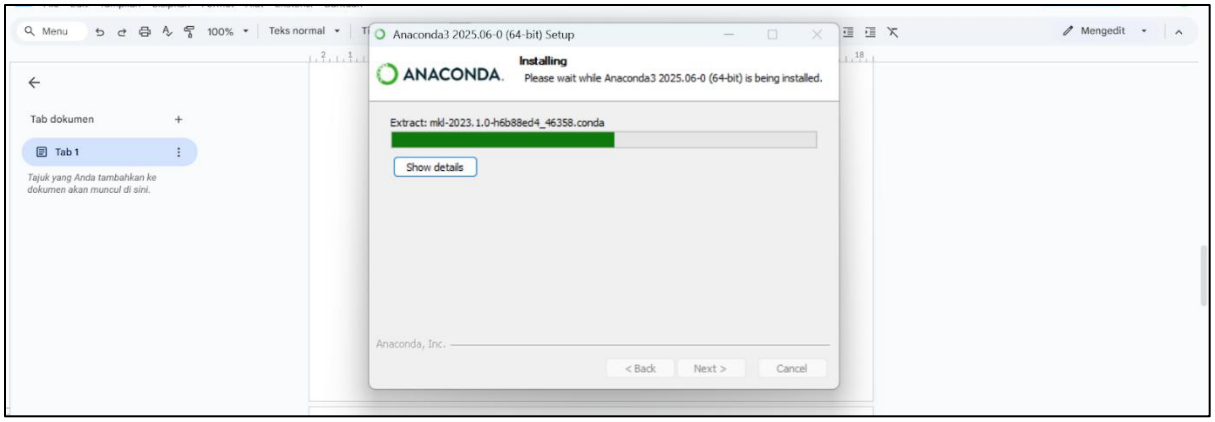


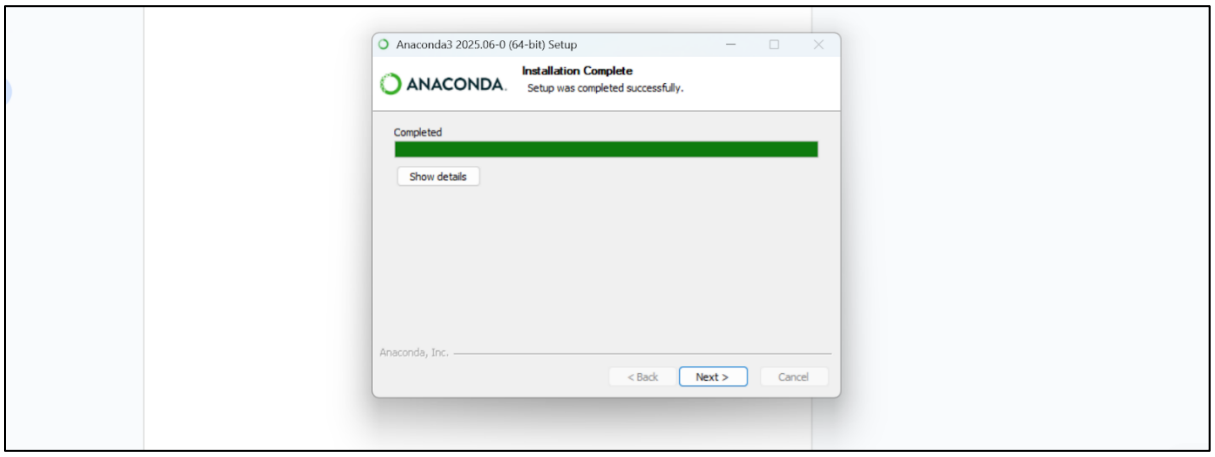
2. Install Anaconda
    a. Jalankan file installer yang sudah diunduh.
    b. Klik Next → Agree → Install for Just Me → Next.
    c. Biarkan default setting (direkomendasikan).
    d. Tunggu sampai selesai.


Downloads
Search Downloads
Anaconda3 2025.06-0 (64-bit) Setup
Welcome to Anaconda3 2025.06-0 (64-bit) Setup
Setup will guide you through the installation of Anaconda3 2025.06-0 (64-bit).
It is recommended that you close all other applications before starting Setup. This will make it possible to update relevant system files without having to reboot your computer.
Click Next to continue.
Next >
Cancel


Anaconda3 2025.06-0 (64-bit) Setup
Select Installation Type
Please select the type of installation you would like to perform for Anaconda3 2025.06-0 (64-bit).
Install for:
Just Me (recommended)
All Users (requires admin privileges)
Anaconda, Inc.
< Back
Next >
Cancel


Anaconda3 2025.06-0 (64-bit) Setup
Choose Install Location
Choose the folder in which to install Anaconda3 2025.06-0 (64-bit).
Setup will install Anaconda3 2025.06-0 (64-bit) in the following folder. To install in a different folder, click Browse and select another folder. Click Next to continue.
Destination Folder
C:\Users\diaha\anaconda3
Browse...
Space required: 5.2 GB
Space available: 180.7 GB
Anaconda, Inc.
< Back
Next >
Cancel


Anaconda3 2025.06-0 (64-bit) Setup
ANACONDA.
Installing
Please wait while Anaconda3 2025.06-0 (64-bit) is being installed.
Extract: mkl-2023.1.0-h6b88ed4_46358.conda
Show details
Anaconda, Inc.
< Back
Next >
Cancel


Anaconda3 2025.06-0 (64-bit) Setup
ANACONDA.
Installation Complete
Setup was completed successfully.
Completed
Show details
Anaconda, Inc.
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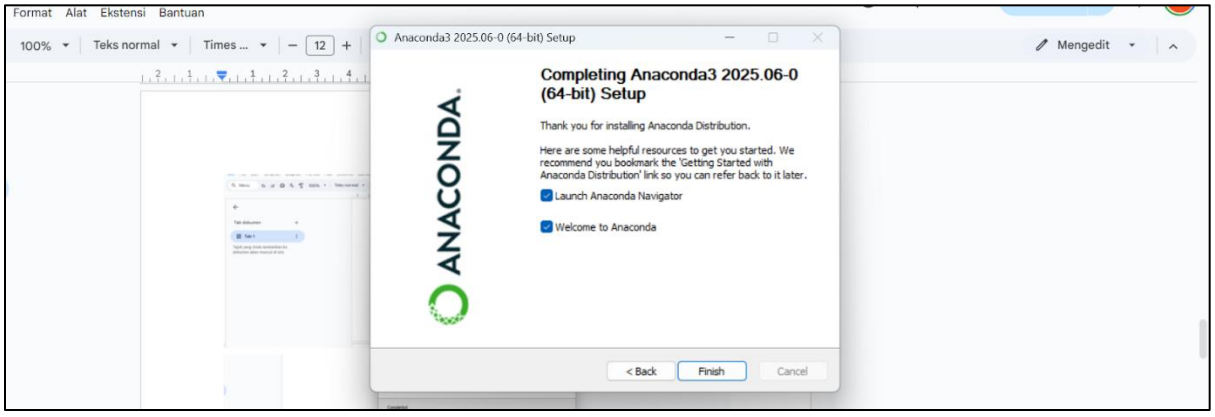
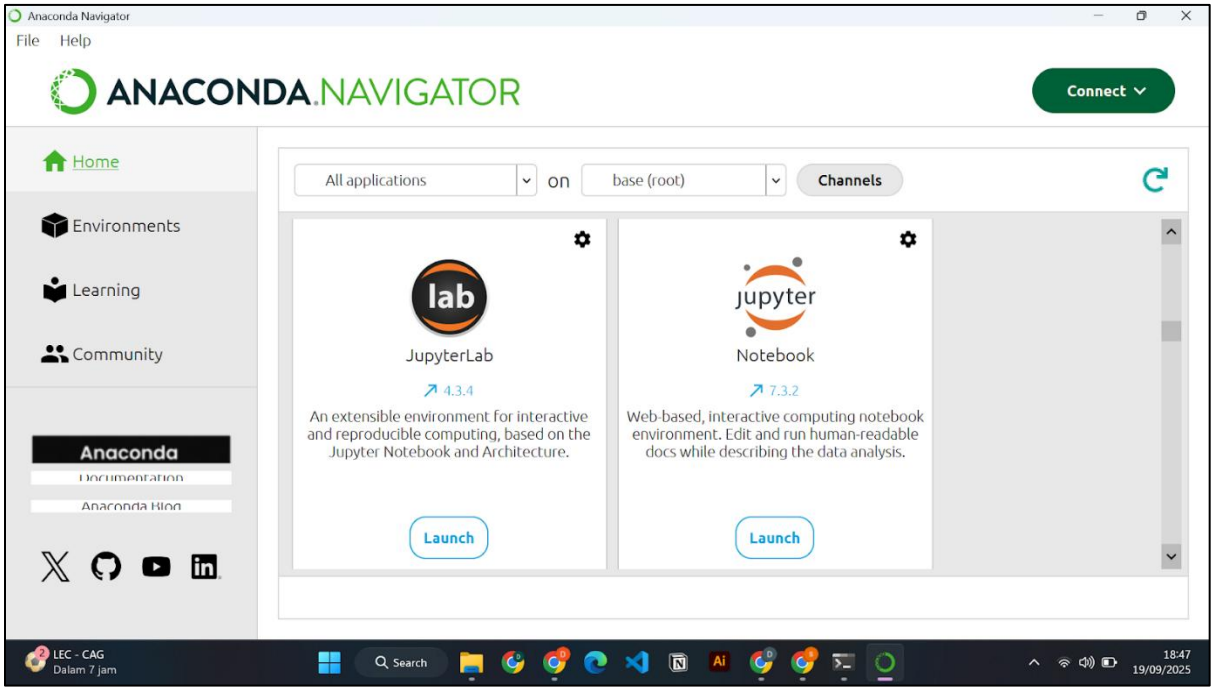
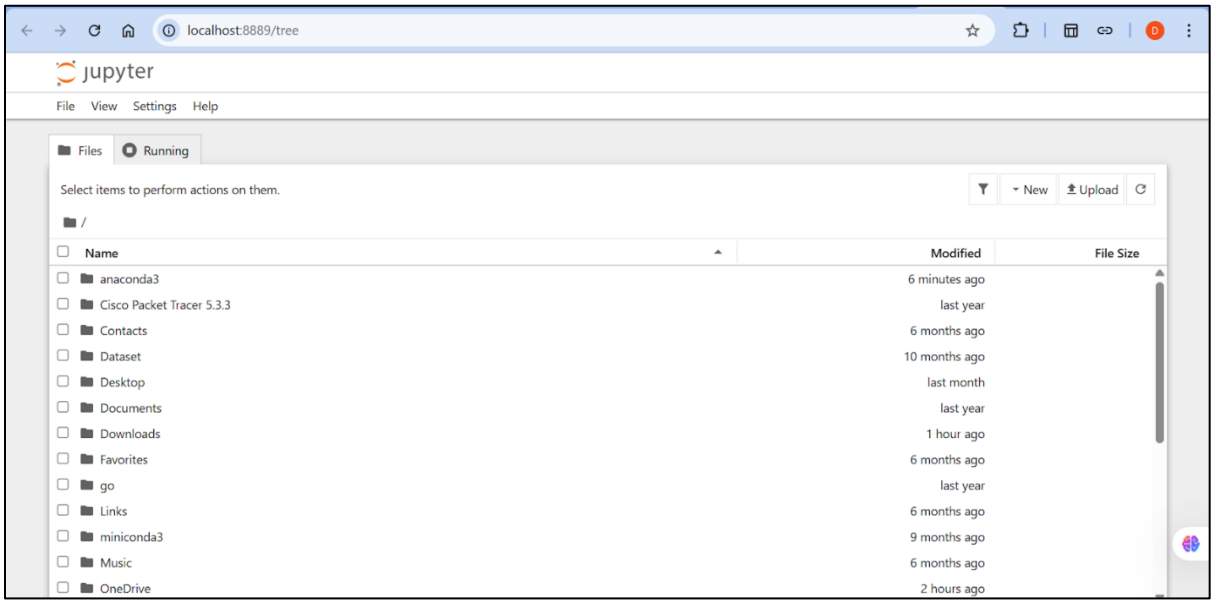
Cancel


Anaconda3 2025.06-0 (64-bit) Setup
ANACONDA.
Completing Anaconda3 2025.06-0 (64-bit) Setup
Thank you for installing Anaconda Distribution.
Here are some helpful resources to get you started. We recommend you bookmark the 'Getting Started with Anaconda Distribution' link so you can refer back to it later.
Launch Anaconda Navigator
Welcome to Anaconda
< Back
Finish
Cancel

3. Buka Jupyter Notebook

- Cari di menu Start: Anaconda Navigator.
- Klik Launch pada Jupyter Notebook.
- Browser akan terbuka otomatis di http://localhost:8888.

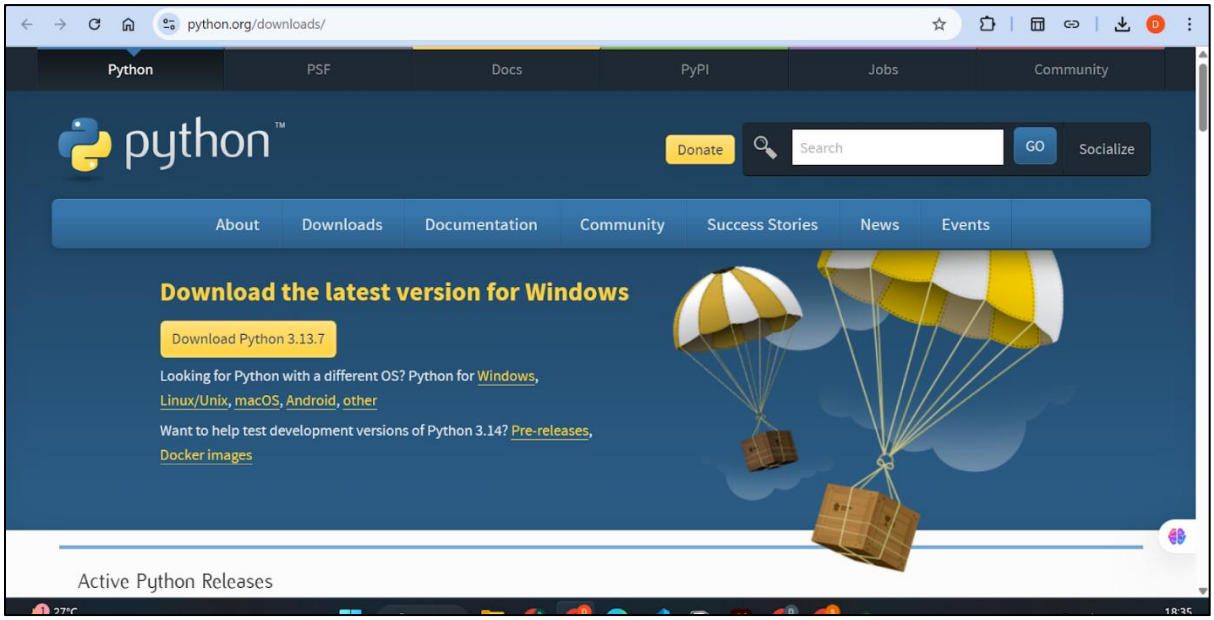


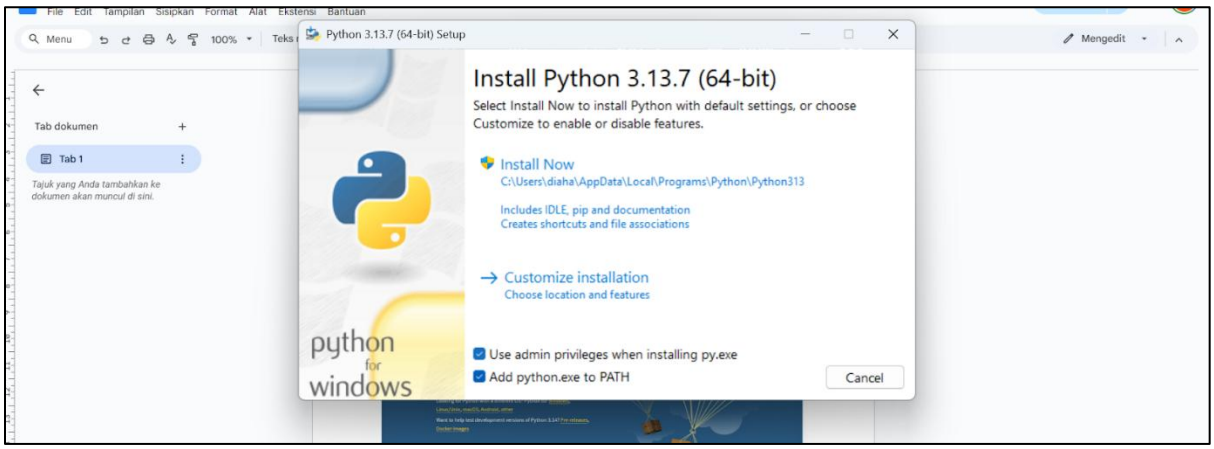


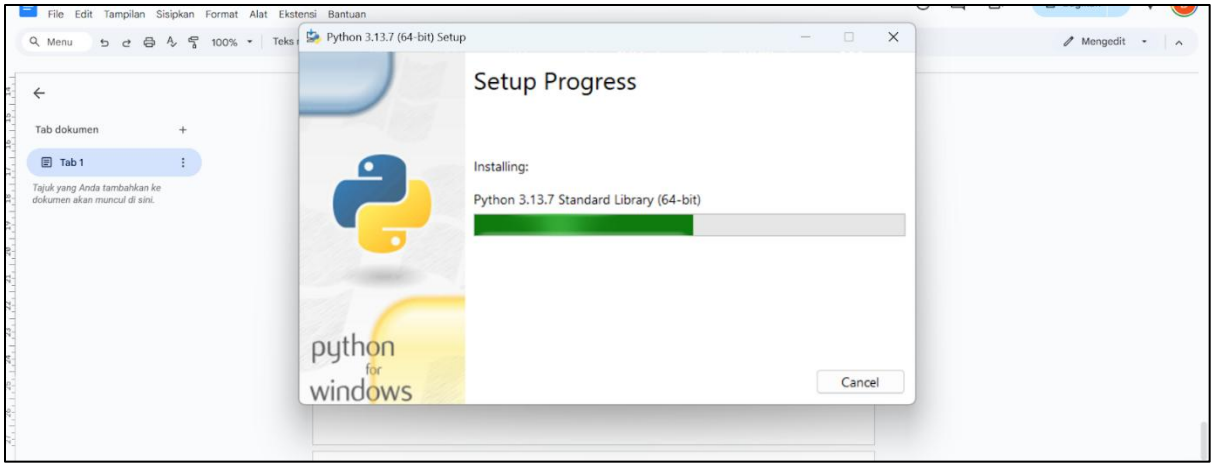
Tutorial Install Jupyter dengan Python Pip

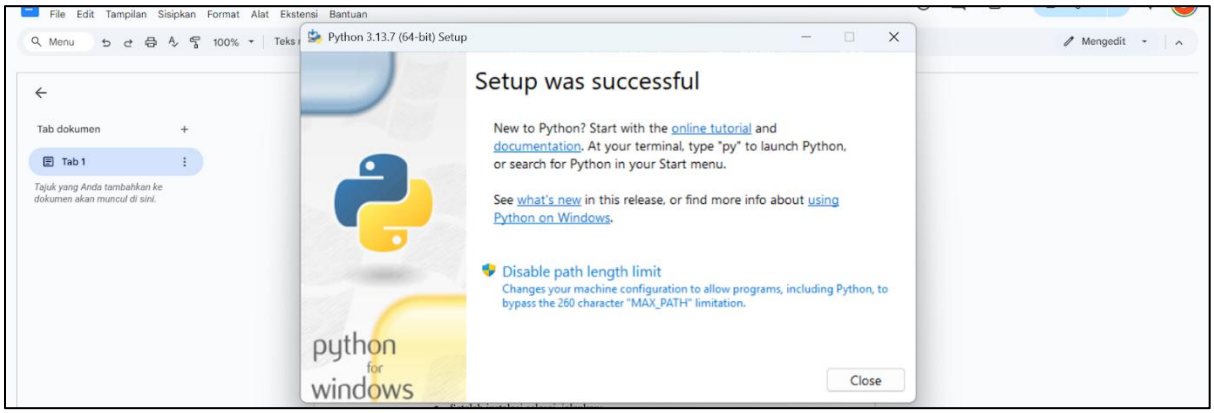
1. Install Python

   - Download dari: https://www.python.org/downloads/
   - Pilih versi terbaru (contoh: Python 3.12).
   - Saat instalasi centang “Add Python to PATH” → lalu klik Install Now.









2. Cek instalasi Python
   - Buka CMD / Terminal.
   - Ketik:
   - python --version
   - Pastikan muncul versi Python (contoh: Python 3.12.3).

```
C:\Users\diaha>python --version
Python 3.13.7

C:\Users\diaha>
```

3. Install Jupyter Notebook via pip
   - Masih di CMD, ketik:
     pip install notebook
   - Jalankan Jupyter Notebook

```
C:\Users\diaha>pip install notebook
Requirement already satisfied: notebook in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (7.4.5)
Requirement already satisfied: jupyter-server<3,>=2.4.0 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (
from notebook) (2.17.0)
Requirement already satisfied: jupyterlab-server<3,>=2.27.1 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packag
es (from notebook) (2.27.3)
Requirement already satisfied: jupyterlab<4.5,>=4.4.5 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (fr
om notebook) (4.4.7)
Requirement already satisfied: notebook-shim<0.3,>=0.2 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (f
rom notebook) (0.2.4)
Requirement already satisfied: tornado>=6.2.0 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (from noteb
ook) (6.5.2)
Requirement already satisfied: anyio>=3.1.0 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (from jupyter
-server<3,>=2.4.0->notebook) (4.10.0)
Requirement already satisfied: argon2-cffi>=21.1 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (from ju
pyter-server<3,>=2.4.0->notebook) (25.1.0)
Requirement already satisfied: jinja2>=3.0.3 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (from jupyte
r-server<3,>=2.4.0->notebook) (3.1.6)
Requirement already satisfied: jupyter-client>=7.4.4 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (fro
m jupyter-server<3,>=2.4.0->notebook) (8.6.3)
Requirement already satisfied: jupyter-core!=5.0.*,>=4.12 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages
 (from jupyter-server<3,>=2.4.0->notebook) (5.8.1)
Requirement already satisfied: jupyter-events>=0.11.0 in c:\users\diaha\appdata\local\programs\python\python313\lib\site-packages (fr
om jupyter-server<3,>=2.4.0->notebook) (0.12.0)
```

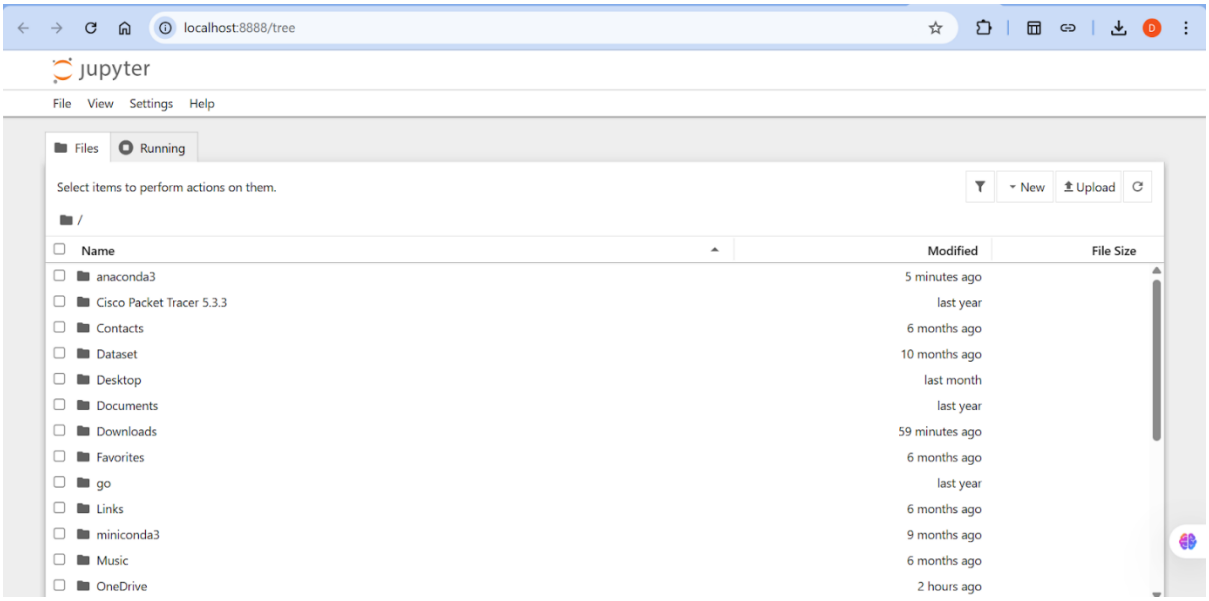
   - Setelah instalasi selesai, jalankan:

     jupyter notebook

```
C:\Users\diaha>jupyter notebook
[I 2025-09-20 13:41:03.577 ServerApp] Extension package jupyter_lsp took 0.3844s to import
[I 2025-09-20 13:41:04.024 ServerApp] Extension package jupyter_server_terminals took 0.4454s to import
[I 2025-09-20 13:41:05.396 ServerApp] jupyter_lsp | extension was successfully linked.
[I 2025-09-20 13:41:05.413 ServerApp] jupyter_server_terminals | extension was successfully linked.
[I 2025-09-20 13:41:05.434 ServerApp] jupyterlab | extension was successfully linked.
[I 2025-09-20 13:41:05.451 ServerApp] notebook | extension was successfully linked.
[I 2025-09-20 13:41:07.332 ServerApp] notebook_shim | extension was successfully linked.
[I 2025-09-20 13:41:07.495 ServerApp] notebook_shim | extension was successfully loaded.
[I 2025-09-20 13:41:07.503 ServerApp] jupyter_lsp | extension was successfully loaded.
[I 2025-09-20 13:41:07.506 ServerApp] jupyter_server_terminals | extension was successfully loaded.
[I 2025-09-20 13:41:07.522 LabApp] JupyterLab extension loaded from C:\Users\diaha\AppData\Local\Programs\Python\Python313\Lib\site-p
ackages\jupyterlab
[I 2025-09-20 13:41:07.523 LabApp] JupyterLab application directory is C:\Users\diaha\AppData\Local\Programs\Python\Python313\share\j
upyter\lab
[I 2025-09-20 13:41:07.525 LabApp] Extension Manager is 'pypi'.
[I 2025-09-20 13:41:09.080 ServerApp] jupyterlab | extension was successfully loaded.
[I 2025-09-20 13:41:09.099 ServerApp] notebook | extension was successfully loaded.
[I 2025-09-20 13:41:09.103 ServerApp] Serving notebooks from local directory: C:\Users\diaha
[I 2025-09-20 13:41:09.103 ServerApp] Jupyter Server 2.17.0 is running at:
[I 2025-09-20 13:41:09.103 ServerApp] http://localhost:8888/tree?token=46350449de4b52fc59e7039183079c99adfa2519b2098db4
[I 2025-09-20 13:41:09.104 ServerApp]     http://127.0.0.1:8888/tree?token=46350449de4b52fc59e7039183079c99adfa2519b2098db4
[I 2025-09-20 13:41:09.104 ServerApp] Use Control-C to stop this server and shut down all kernels (twice to skip confirmation).
[C 2025-09-20 13:41:09.296 ServerApp]

    To access the server, open this file in a browser:
        file:///C:/Users/diaha/AppData/Roaming/jupyter/runtime/jpserver-10600-open.html
    Or copy and paste one of these URLs:
        http://localhost:8888/tree?token=46350449de4b52fc59e7039183079c99adfa2519b2098db4
        http://127.0.0.1:8888/tree?token=46350449de4b52fc59e7039183079c99adfa2519b2098db4
[I 2025-09-20 13:41:10.287 ServerApp] Skipped non-installed server(s): basedpyright, bash-language-server, dockerfile-language-server
-nodejs, javascript-typescript-langserver, jedi-language-server, julia-language-server, pyrefly, pyright, python-language-server, pyt
```

- Browser akan terbuka otomatis di http://localhost:8888.



Tugas Praktikum Mandiri

Membaca File Dataset

1. Buat folder **data** dalam directory project jupyter notebook anda, folder ini untuk menyimpan file-file dataset
2. Letakan file-file dataset download dari e-learning elena, ektrak file-file data dan letakan dalam folder data
3. Buat folder **notebooks** dalam directory project jupyter notebook anda, folder ini untuk menyimpan file2 jupyter notebook (file extensi.ipynb)
4. Buat file pertama jupyter notebook anda dalam folder notebooks, beri nama file: praktikum01, dan tambahkan kode berikut ini:

```
[8]: import pandas as pd

     # Read the CSV file with a comma delimiter
     df = pd.read_csv('../data/day.csv', sep=',')

     # cetak header data (5 baris data) dari file
     df.head()
```

[8]:

	instant	dteday	season	yr	mnth	holiday	weekday	workingday	weathersit	temp	atemp	hum	windspeed	casual	registered	cnt
0	1	2011-01-01	1	0	1	0	6	0	2	0.344167	0.363625	0.805833	0.160446	331	654	985
1	2	2011-01-02	1	0	1	0	0	0	2	0.363478	0.353739	0.696087	0.248539	131	670	801
2	3	2011-01-03	1	0	1	0	1	1	1	0.196364	0.189405	0.437273	0.248309	120	1229	1349
3	4	2011-01-04	1	0	1	0	2	1	1	0.200000	0.212122	0.590435	0.160296	108	1454	1562
4	5	2011-01-05	1	0	1	0	3	1	1	0.226957	0.229270	0.436957	0.186900	82	1518	1600

Manual dokumentasi:

https://pandas.pydata.org/docs/reference/api/pandas.read_csv.html

Latihan Mandiri:

1. Lakukan latihan baca file dataset lainnya dan tampilkan !
2. Buat dataframe baru (missal: df1) dari dataframe sebelumnya, dengan data yang diambil adalah instant, dteday,session,temp,hum,windspeed
3. Cetak dataframe baru kelayar
4. Simpan dataframe ke file csv baru ke direktori data dengan nama latihan01.csv