Tugas 1: Tugas Praktikum Mandiri 1 – Machine Learning

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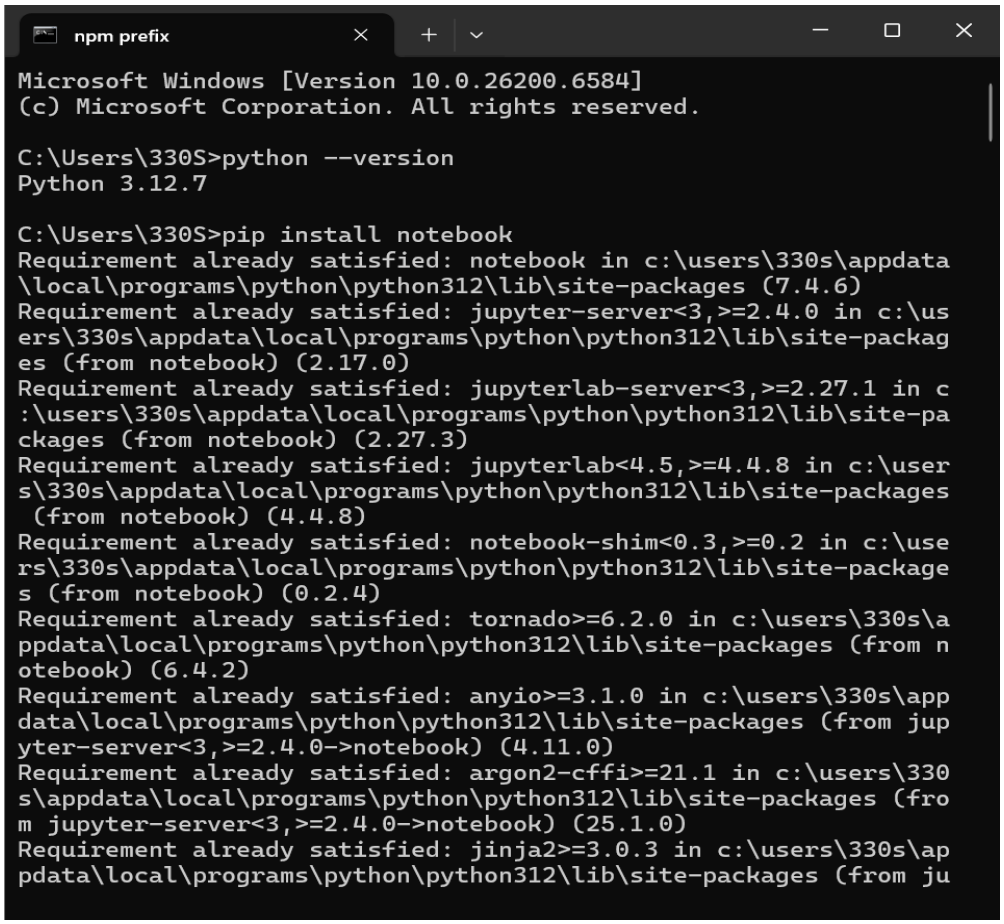
1. Latihan Mandiri 1



```
npm prefix
Microsoft Windows [Version 10.0.26200.6584]
(c) Microsoft Corporation. All rights reserved.

C:\Users\330S>python --version
Python 3.12.7

C:\Users\330S>pip install notebook
Requirement already satisfied: notebook in c:\users\330s\appdata
\local\programs\python\python312\lib\site-packages (7.4.6)
Requirement already satisfied: jupyter-server<3,>=2.4.0 in c:\us
ers\330s\appdata\local\programs\python\python312\lib\site-packag
es (from notebook) (2.17.0)
Requirement already satisfied: jupyterlab-server<3,>=2.27.1 in c
:\users\330s\appdata\local\programs\python\python312\lib\site-pa
ckages (from notebook) (2.27.3)
Requirement already satisfied: jupyterlab<4.5,>=4.4.8 in c:\user
s\330s\appdata\local\programs\python\python312\lib\site-packages
 (from notebook) (4.4.8)
Requirement already satisfied: notebook-shim<0.3,>=0.2 in c:\use
rs\330s\appdata\local\programs\python\python312\lib\site-package
s (from notebook) (0.2.4)
Requirement already satisfied: tornado>=6.2.0 in c:\users\330s\a
ppdata\local\programs\python\python312\lib\site-packages (from n
otebook) (6.4.2)
Requirement already satisfied: anyio>=3.1.0 in c:\users\330s\app
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yter-server<3,>=2.4.0->notebook) (4.11.0)
Requirement already satisfied: argon2-cffi>=21.1 in c:\users\330
s\appdata\local\programs\python\python312\lib\site-packages (fro
m jupyter-server<3,>=2.4.0->notebook) (25.1.0)
Requirement already satisfied: jinja2>=3.0.3 in c:\users\330s\ap
pdata\local\programs\python\python312\lib\site-packages (from ju
```
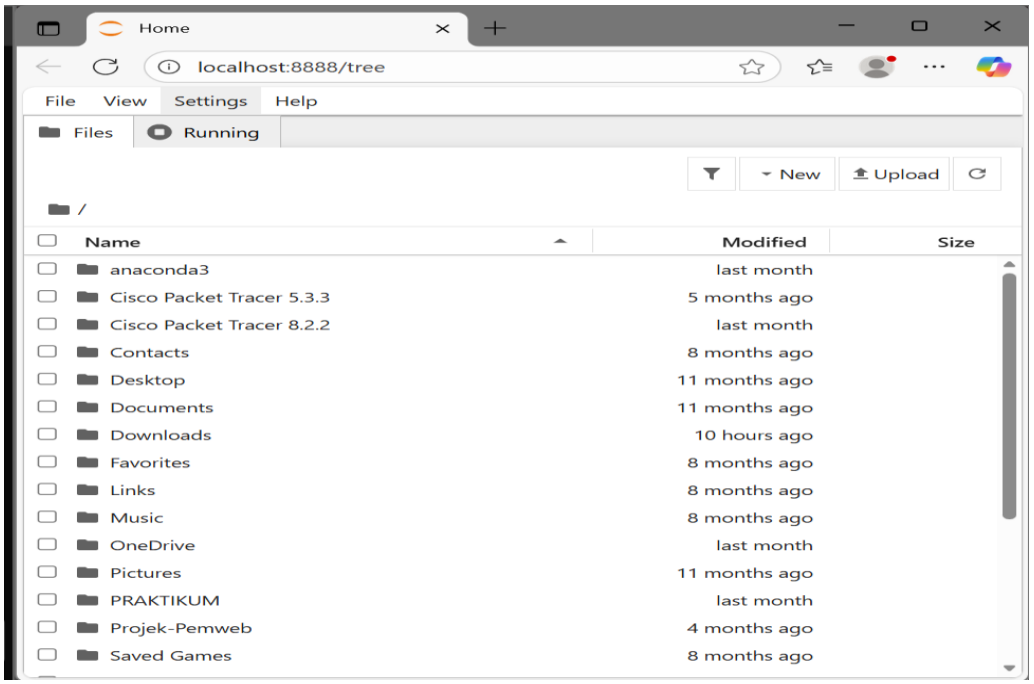

```
npm prefix
pl]>=4.18.0->jupyter-events>=0.11.0->jupyter-server<3,>=2.4.0->n
otebook) (2.9.0.20250822)

[notice] A new release of pip is available: 24.3.1 -> 25.3
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Users\330S>jupyter notebook
[I 2025-11-03 19:29:59.763 ServerApp] jupyter_lsp | extension wa
s successfully linked.
[I 2025-11-03 19:29:59.784 ServerApp] jupyter_server_terminals |
 extension was successfully linked.
[I 2025-11-03 19:29:59.795 ServerApp] jupyterlab | extension was
 successfully linked.
[I 2025-11-03 19:29:59.802 ServerApp] notebook | extension was s
uccessfully linked.
[I 2025-11-03 19:30:00.750 ServerApp] notebook_shim | extension
was successfully linked.
[I 2025-11-03 19:30:00.985 ServerApp] notebook_shim | extension
was successfully loaded.
[I 2025-11-03 19:30:01.001 ServerApp] jupyter_lsp | extension wa
s successfully loaded.
[I 2025-11-03 19:30:01.007 ServerApp] jupyter_server_terminals |
 extension was successfully loaded.
[I 2025-11-03 19:30:01.033 LabApp] JupyterLab extension loaded f
rom C:\Users\330S\AppData\Local\Programs\Python\Python312\Lib\si
te-packages\jupyterlab
[I 2025-11-03 19:30:01.033 LabApp] JupyterLab application direct
ory is C:\Users\330S\AppData\Local\Programs\Python\Python312\sha
re\jupyter\lab
[I 2025-11-03 19:30:01.049 LabApp] Extension Manager is 'pypi'.
[I 2025-11-03 19:30:01.683 ServerApp] jupyterlab | extension was
 successfully loaded.
```



Latihan Mandiri 1.2

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Code JupyterLab Python 3 (ipykernel)

[1]:

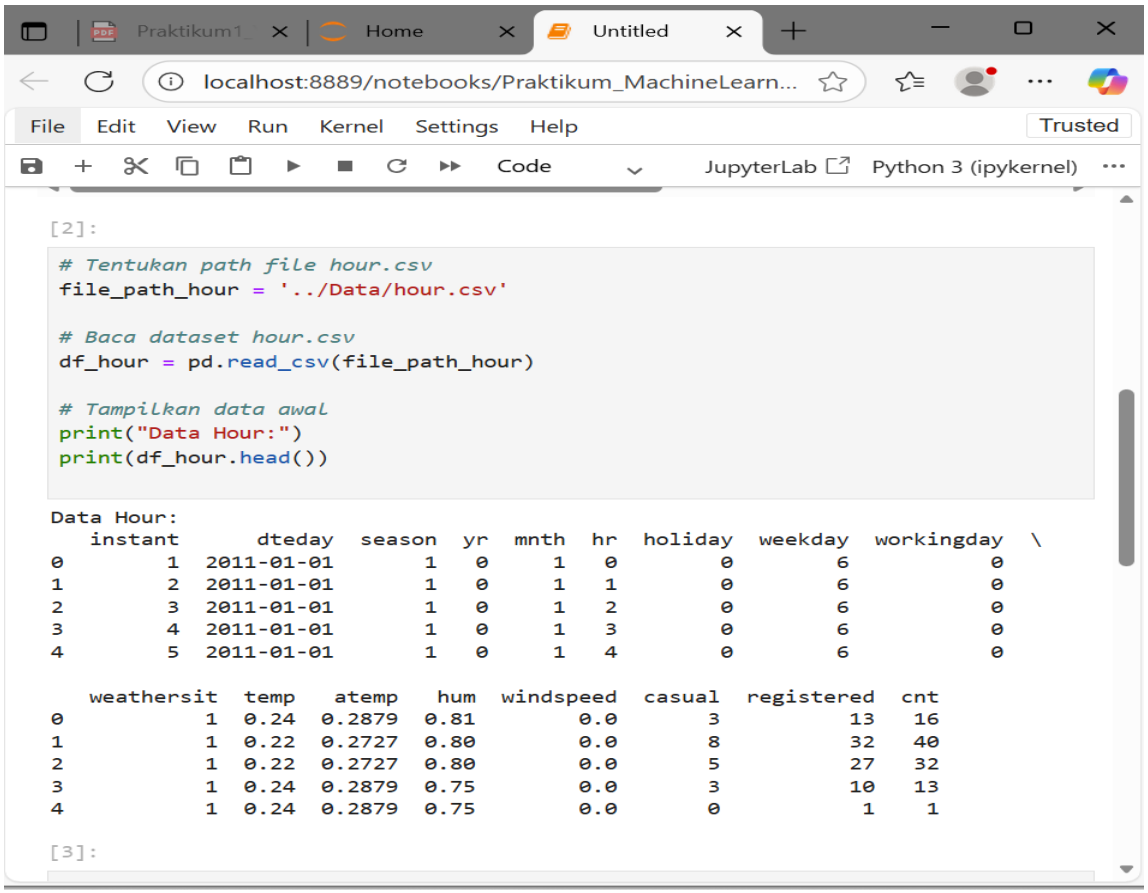
```python
import pandas as pd

# Baca dataset harian (day.csv)
df = pd.read_csv('../Data/day.csv', sep=',')

# Lihat 5 baris pertama dari data
df.head()
```

[1]:

	instant	dteday	season	yr	mnth	holiday	weekday	workingday	weathersit	ter
0	1	2011-01-01	1	0	1	0	6	0	2	0.3441
1	2	2011-01-02	1	0	1	0	0	0	2	0.3634
2	3	2011-01-03	1	0	1	0	1	1	1	0.1963
3	4	2011-01-04	1	0	1	0	2	1	1	0.2000
4	5	2011-01-05	1	0	1	0	3	1	1	0.2269

1. *Penjelasan singkat:*

- import pandas as pd → memanggil library pandas.
- pd.read_csv() → membaca file CSV.
- '../Data/day.csv' → lokasi file-nya (pastikan sudah kamu simpan di folder Data).
- df.head() → menampilkan 5 baris pertama dari data.



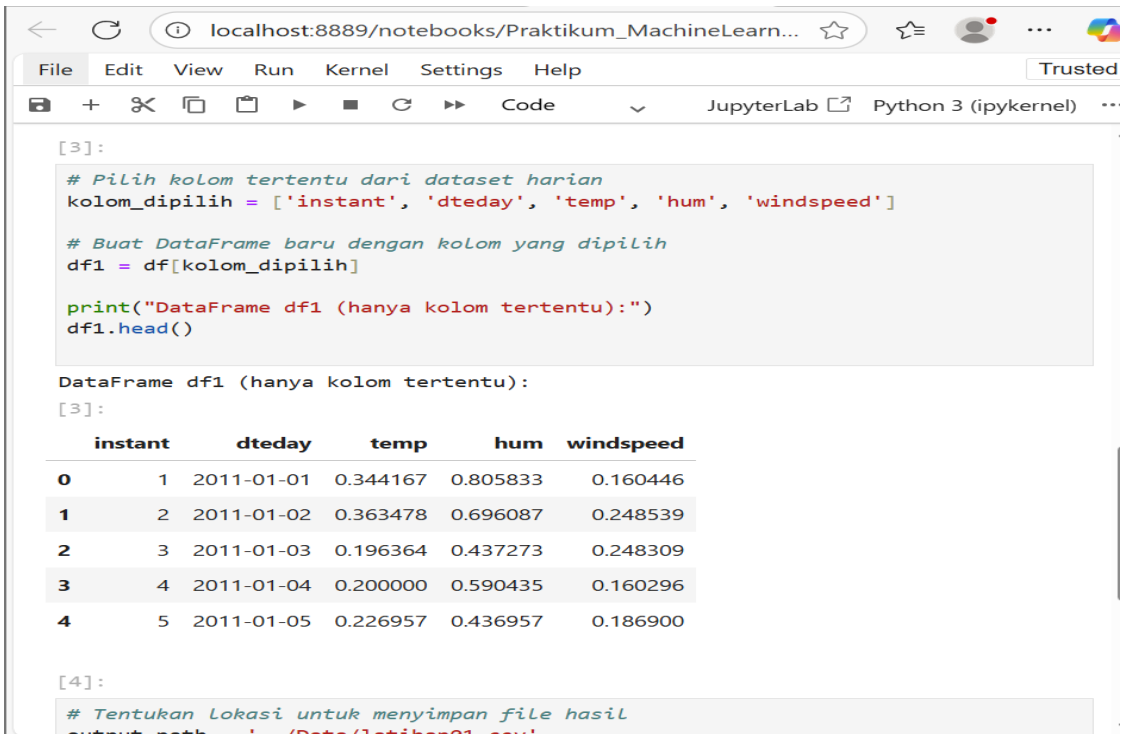
[2]:

```
# Tentukan path file hour.csv
file_path_hour = '../Data/hour.csv'

# Baca dataset hour.csv
df_hour = pd.read_csv(file_path_hour)

# Tampilkan data awal
print("Data Hour:")
print(df_hour.head())
```

```
Data Hour:
   instant       dteday  season  yr  mnth  hr  holiday  weekday  workingday  \
0        1   2011-01-01       1   0     1   0        0        6           0
1        2   2011-01-01       1   0     1   1        0        6           0
2        3   2011-01-01       1   0     1   2        0        6           0
3        4   2011-01-01       1   0     1   3        0        6           0
4        5   2011-01-01       1   0     1   4        0        6           0

   weathersit  temp   atemp   hum  windspeed  casual  registered  cnt
0           1  0.24  0.2879  0.81        0.0       3          13   16
1           1  0.22  0.2727  0.80        0.0       8          32   40
2           1  0.22  0.2727  0.80        0.0       5          27   32
3           1  0.24  0.2879  0.75        0.0       3          10   13
4           1  0.24  0.2879  0.75        0.0       0           1    1
```

[3]:

2. Penjelasan:
   Ini buat ngecek apakah data hour.csv juga bisa dibaca dengan benar.



[3]:

```
# Pilih kolom tertentu dari dataset harian
kolom_dipilih = ['instant', 'dteday', 'temp', 'hum', 'windspeed']

# Buat DataFrame baru dengan kolom yang dipilih
df1 = df[kolom_dipilih]

print("DataFrame df1 (hanya kolom tertentu):")
df1.head()
```

```
DataFrame df1 (hanya kolom tertentu):
```

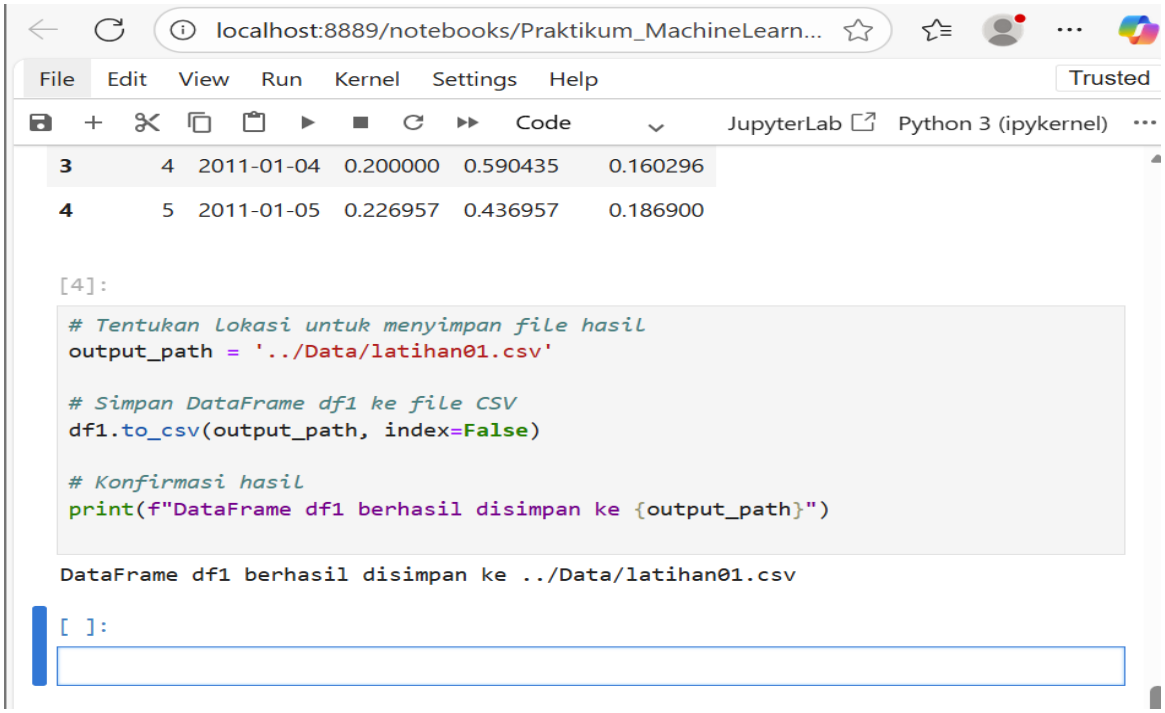
[3]:

	instant	dteday	temp	hum	windspeed
0	1	2011-01-01	0.344167	0.805833	0.160446
1	2	2011-01-02	0.363478	0.696087	0.248539
2	3	2011-01-03	0.196364	0.437273	0.248309
3	4	2011-01-04	0.200000	0.590435	0.160296
4	5	2011-01-05	0.226957	0.436957	0.186900

[4]:

```
# Tentukan lokasi untuk menyimpan file hasil
```

3. *Penjelasan:*
   Kita bikin DataFrame baru df1 yang cuma berisi 5 kolom penting biar datanya lebih ringkas.



4. *Penjelasan:*
   Kode ini nyimpan hasil filtering ke file baru latihan01.csv di folder Data.

LINK GITHUB UPLOAD TUGAS :

https://github.com/AliaMaisyarah14/Praktikum02ML.git