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TASK OF DAY- 4:-

1. Install and import scikit-learn.

```
PS C:\Users\Heet\Desktop\PROGRAMS> pip install scikit-learn

Defaulting to user installation because normal site-packages is not writeable
Collecting scikit-learn
Using cached scikit_learn-1.7.0-cp313-win_amd64.whl.metadata (14 kB)
Requirement already satisfied: numpy>=1.22.0 in c:\users\heet\appdata\roaming\python\python313\site-packages (from scikit-learn) (2.3.1)
Requirement already satisfied: scipy>=1.8.0 in c:\users\heet\appdata\roaming\python\python313\site-packages (from scikit-learn) (1.16.0)
Requirement already satisfied: joblib>=1.2.0 in c:\users\heet\appdata\roaming\python\python313\site-packages (from scikit-learn) (1.5.1)
Requirement already satisfied: threadpooletl>=3.1.0 in c:\users\heet\appdata\roaming\python\python313\site-packages (from scikit-learn) (3.6.0)
Using cached scikit_learn-1.7.0-cp313-cp313-win_amd64.whl (10.7 MB)
Installing collected packages: scikit-learn
Successfully installed scikit-learn-1.7.0
```

2. Load the Iris dataset and print features and labels.

```
from sklearn.datasets import load_iris
iris = load_iris()
# Features
print("Feature names:", iris.feature_names)
print("Features:\n", iris.data)
# Labels
print("\nTarget names:", iris.target_names)
print("Labels:\n", iris.target)
```

OUTPUT:-

```
eature names: ['sepal length (cm)', 'sepal width (cm)', 'petal length (cm)', 'petal width (cm)']
[4.9 3. 1.4 0.2]
[4.7 3.2 1.3 0.2]
[4.6 3.1 1.5 0.2]
[5. 3.6 1.4 0.2]
[5.4 3.9 1.7 0.4]
[4.6 3.4 1.4 0.3]
[5. 3.4 1.5 0.2]
[4.8 3.4 1.6 0.2]
[4.8 3. 1.4 0.1]
[4.3 3. 1.1 0.1]
Target names: ['setosa' 'versicolor' 'virginica']
Labels:
2 2]
```

3. Load a CSV dataset of your choice using pandas and display the first 5 rows.

import pandas as pd
file_path = r'C:\Users\Heet\Desktop\PROGRAMS\NEW LEARNINGS\Python\circuits.csv'
data = pd.read_csv(file_path, encoding='ISO-8859-1')
print("First 5 Rows:\n", data.head())

OUTPUT:-

```
O PS C:\Users\Heet\Desktop\PROGRAMS> python -u "c:\Users\Heet\Desktop\PROGRAMS\NEW LEARNINGS\Python\day3_3.py"

● First 5 Rows:

circuitId circuitRef name ... lng alt url

0 1 albert_park Albert Park Grand Prix Circuit ... 144.96800 10.0 http://en.wikipedia.org/wiki/Melbourne_Grand_P...

1 2 sepang Sepang International Circuit ... 101.73800 NaN http://en.wikipedia.org/wiki/Sepang_Internatio...

2 3 bahrain Bahrain International Circuit ... 50.51060 NaN http://en.wikipedia.org/wiki/Bahrain_Internati...

3 4 catalunya Circuit de Barcelona-Catalunya ... 2.26111 NaN http://en.wikipedia.org/wiki/Circuit_de_Barcel...

4 5 istanbul Istanbul Park ... 29.40500 NaN http://en.wikipedia.org/wiki/Istanbul_Park

[5 rows x 9 columns]
```