

EXPERIMENT – 4

OUTPUT:

The screenshot shows the Microsoft Visual Studio Code interface. The left sidebar has icons for file, search, and other tools. The main area shows a Python script named '04.py' with the following code:

```
D: > College > Machine Learning > Experiments > Code Files > 04.py > ...
1 from sklearn.neural_network import MLPClassifier
2 from sklearn.datasets import load_iris
3 from sklearn.model_selection import train_test_split
4 iris = load_iris()
5 X_train, X_test, y_train, y_test = train_test_split(iris.data, iris.target)
6 clf = MLPClassifier()
7 clf.fit(X_train, y_train)
8 print("Accuracy:", clf.score(X_test, y_test))
```

The terminal tab at the bottom shows the execution of the script. It starts with the command 'python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' followed by a process ID. Then it shows the Python interpreter's path and the execution of the script. The output in the terminal is:

```
PS D:\College\Machine Learning\Experiments\Code Files> d:; cd 'd:\College\Machine Learning\Experiments\Code Files'; & 'c:\Users\HARSHINI RN\AppData\Local\Microsoft\WindowsApps\python3.13.exe' 'c:\Users\HARSHINI RN\.vscode\extensions\ms-python.debugpy-2025.18.0-win32-x64\bundled\libs\debugpy\launcher' '56090' '--' 'd:\College\Machine Learning\Experiments\Code Files\04.py'
C:\Users\HARSHINI RN\AppData\Local\Packages\PythonSoftwareFoundation.Python.3.13_qbz5n2kfra8p0\LocalCache\local-packages\Python313\site-packages\sklearn\neural_network\_multilayer_perceptron.py:785: ConvergenceWarning: Stochastic Optimizer: Maximum iterations (200) reached and the optimization hasn't converged yet.
  warnings.warn(
Accuracy: 1.0
```

The status bar at the bottom indicates 'Spaces: 4' and 'UTF-8'. Other status indicators include 'Python 3.13.9 (Microsoft Store)', '(•) Go Live', and a refresh icon.