

EXPERIMENT – 8

OUTPUT:

The screenshot shows a Microsoft Visual Studio Code (VS Code) interface. The top bar includes standard icons for file operations, search, and windows control. A sidebar on the left contains icons for file, search, and other development tools.

The main area displays a Python file named `08.py` with the following code:

```
1 from sklearn.linear_model import LinearRegression
2 import numpy as np
3 X = np.array([1,2,3,4,5]).reshape(-1,1)
4 y = np.array([2,4,5,4,5])
5 model = LinearRegression()
6 model.fit(X, y)
7 x_new = float(input("Enter X for prediction: "))
8 print("Predicted Y:", model.predict([[x_new]]))
```

Below the code editor is a navigation bar with tabs: PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and a dropdown menu. The TERMINAL tab is active, showing the following terminal session:

- A terminal prompt indicating the current directory is `D:\College\Machine Learning\Experiments\Code Files`.
- The command `cd 'd:\College\Machine Learning\Experiments\Code Files'` is run.
- The command `& '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' '56561' -- 'd:\College\Machine Learning\Experiments\Code Files\08.py'` is run, which starts a Python debugger.
- The user is prompted to "Enter X for prediction: 6".
- The output "Predicted Y: 5.8" is displayed.
- A second terminal prompt is shown at the bottom: `PS D:\College\Machine Learning\Experiments\Code Files>`.

The bottom status bar shows system information: Spaces: 4, UTF-8, Python 3.13.9 (Microsoft Store), and Go Live.