

EXPERIMENT – 11

OUTPUT:

The screenshot shows a Microsoft Visual Studio Code interface. The left sidebar contains icons for file operations like Open, Save, Find, and Settings. The main area displays a Python script named '11.py' with syntax highlighting. The code imports 'DecisionTreeClassifier' from 'sklearn.tree' and 'pandas' as 'pd'. It creates a DataFrame 'df' from a dictionary 'data' containing 'Income', 'Debt', and 'Score' lists. It then fits a model and makes a prediction based on user input for Income and Debt.

```
D: > College > Machine Learning > Experiments > Code Files > 11.py > ...
1  from sklearn.tree import DecisionTreeClassifier
2  import pandas as pd
3  data = {'Income': [50000,60000,30000,70000], 'Debt': [2000,1000,5000,1500], 'Score': [
4  df = pd.DataFrame(data)
5  X = df[['Income', 'Debt']]
6  y = df['Score']
7  model = DecisionTreeClassifier()
8  model.fit(X, y)
9  income = float(input("Enter Income: "))
10 debt = float(input("Enter Debt: "))
11 print("Predicted Score:", model.predict([[income, debt]])[0])
```

Below the editor, there are tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and PORTS. The TERMINAL tab is active, showing the command line output:

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS Python Debug Console + x ... | x
```

```
Enter Income: 55000
Enter Debt: 1800
C:\Users\HARSHTINT RN\AppData\Local\ Packages\PythonSoftwareFoundation.Python.3.13_qbz5n2kfra8p0\LocalCache\local-packages\Python313\site-packages\sklearn\utils\validation.py:2691: UserWarning: X does not have valid feature names, but DecisionTreeClassifier was fitted with feature names
  warnings.warn(
Predicted Score: Good
PS D:\College\Machine Learning\Experiments\Code Files>
```