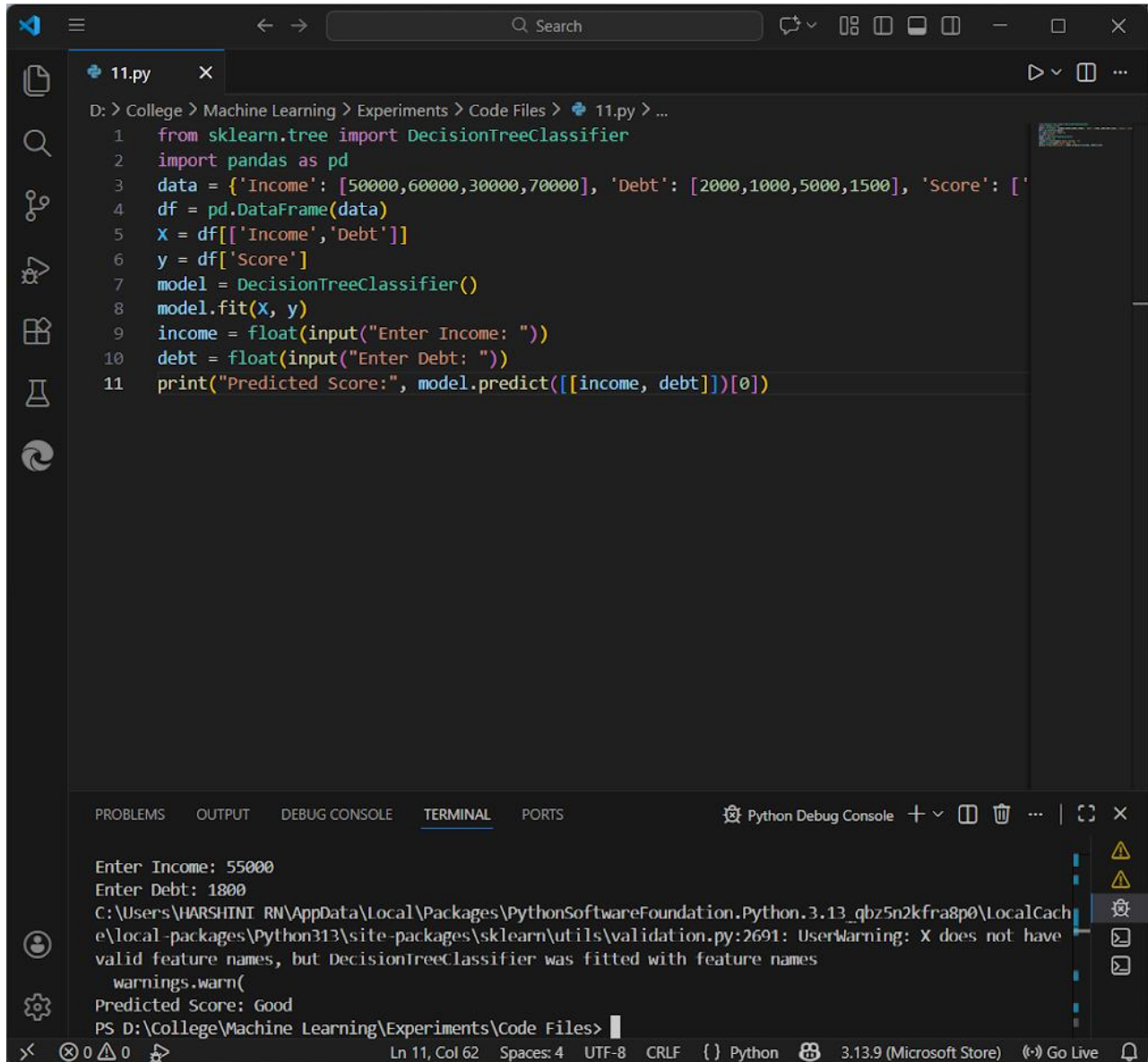


## EXPERIMENT – 11

OUTPUT:



The screenshot displays a Visual Studio Code editor window with a Python file named `11.py`. The script defines a `DecisionTreeClassifier` model, fits it with training data, and predicts a score based on user input for income and debt. The terminal at the bottom shows the execution of the script, including user input and a warning message from sklearn.

```
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])
```

Enter Income: 55000  
Enter Debt: 1800  
C:\Users\HARSHIT\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>

Ln 11, Col 62 Spaces: 4 UTF-8 CRLF {} Python 3.13.9 (Microsoft Store) Go Live