

## EXPERIMENT – 19

### OUTPUT:

The screenshot shows the Microsoft Visual Studio Code interface. The left sidebar has icons for file operations like Open, Save, Find, and Refresh. The main area shows a code editor with a Python file named '19.py'. The code imports GaussianNB from sklearn.naive\_bayes and pandas, creates a DataFrame from a dictionary of data, fits it to X and y, and prints the result of the prediction for given income and credit scores.

```
D: > College > Machine Learning > Experiments > Code Files > 19.py > ...
1  from sklearn.naive_bayes import GaussianNB
2  import pandas as pd
3  data = {'Income': [50000,30000,70000,40000], 'CreditScore': [650,500,800,600], 'Loan': [1,0,1,0]}
4  df = pd.DataFrame(data)
5  X = df[['Income','CreditScore']]
6  y = df['Loan']
7  model = GaussianNB()
8  model.fit(X, y)
9  income = float(input("Enter Income: "))
10 credit = float(input("Enter Credit Score: "))
11 print("Loan Approved (1=Yes,0=No):", model.predict([[income, credit]])[0])
```

The terminal tab at the bottom shows the execution of the script. It prompts for income and credit score, then prints the loan approval status. There is also a warning message from the sklearn library about feature names.

```
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' '63028' '--' 'd:\College\Machine Learning\Experiments\Code Files\19.py'
Enter Income: 60000
Enter Credit Score: 700
C:\Users\HARSHINI 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 GaussianNB was fitted with feature names
  warnings.warn(
  Loan Approved (1=Yes,0=No): 1
○ PS D:\College\Machine Learning\Experiments\Code Files>
```

The status bar at the bottom indicates the terminal has 4 spaces, is in UTF-8 encoding, uses Python 3.13.9, and is connected to the Microsoft Store.