

EXPERIMENT – 6

OUTPUT:

The screenshot shows the Microsoft Visual Studio Code interface. On the left is a sidebar with various icons. The main area has a tab for '06.py'. Below it is a terminal window.

```
D: > College > Machine Learning > Experiments > Code Files > 06.py > ...
1  from sklearn.naive_bayes import GaussianNB
2  from sklearn.metrics import confusion_matrix, accuracy_score
3  from sklearn.datasets import load_iris
4  from sklearn.model_selection import train_test_split
5  iris = load_iris()
6  X_train, X_test, y_train, y_test = train_test_split(iris.data, iris.target)
7  model = GaussianNB()
8  model.fit(X_train, y_train)
9  y_pred = model.predict(X_test)
10 print("Confusion Matrix:")
11 print(confusion_matrix(y_test, y_pred))
12 print("Accuracy:", accuracy_score(y_test, y_pred))

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL ...
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
[[12  0  0]
 [ 0 17  0]
 [ 0  1  8]]
Accuracy: 0.9736842105263158
PS D:\College\Machine Learning\Experiments\Code Files>
```

The terminal output shows the execution of the Python script '06.py'. It imports necessary libraries, loads the Iris dataset, splits it into training and testing sets, creates a Gaussian Naive Bayes model, fits it to the training data, makes predictions on the test data, prints the confusion matrix, and calculates the accuracy. The output indicates an accuracy of 0.9736842105263158.