FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

Models are evaluated using:

- **Accuracy**
- **Precision**
- **Recall**
- **F1-score**

```
# Evaluate the model
print(confusion_matrix(y_test, y_pred))
print(classification_report(y_test, y_pred))
print("Accuracy:", accuracy_score(y_test, y_pred))
```

```
[[5 0]
 [0 5]]
              precision    recall  f1-score   support

           0       1.00      1.00      1.00         5
           1       1.00      1.00      1.00         5

    accuracy                           1.00        10
   macro avg       1.00      1.00      1.00        10
weighted avg       1.00      1.00      1.00        10

Accuracy: 1.0
```

Evaluating accuracy, precision, recall, and F1-score for various ML models.