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In [1]: from sklearn.datasets import load_breast_cancer
from sklearn.model_selection import train_test_split
from sklearn.tree import DecisionTreeClassifier
from sklearn.metrics import accuracy_score, classification_report
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In [2]: # Load Breast Cancer dataset
data = load_breast_cancer()
X = data.data
y = data.target
```

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In [3]: # Split dataset into train and test sets
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
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In [4]: # Initialize Decision Tree classifier
clf = DecisionTreeClassifier(random_state=42)
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In [5]: # Train the classifier
clf.fit(X_train, y_train)
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Out[5]: ▼      DecisionTreeClassifier
DecisionTreeClassifier(random_state=42)
```

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In [6]: # Make predictions on test data
y_pred = clf.predict(X_test)
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In [7]: # Calculate accuracy
accuracy = accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
```

Accuracy: 0.9473684210526315

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In [8]: # Display classification report
print("\nClassification Report:")
print(classification_report(y_test, y_pred, target_names=data.target_names))
```

Classification Report:

	precision	recall	f1-score	support
malignant	0.93	0.93	0.93	43
benign	0.96	0.96	0.96	71
accuracy			0.95	114
macro avg	0.94	0.94	0.94	114
weighted avg	0.95	0.95	0.95	114

```
In [ ]:
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