

main32.py X

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```
1  #import necessary library
2  import pandas as pd
3  from sklearn.model_selection import train_test_split
4  from sklearn.ensemble import RandomForestClassifier
5  from sklearn.metrics import accuracy_score, classification_report
6  from sklearn.preprocessing import StandardScaler
7
8  # load the data
9  from sklearn.datasets import load_iris
10
11 iris = load_iris()
12 X, y = iris.data, iris.target
13
14 # Standard Scaling
15 scaler = StandardScaler()
16 X_scaled = scaler.fit_transform(X)
17
18 # train test split
19 X_train, X_test, y_train, y_test = train_test_split(X_scaled, y, test_size=0.2, random_state=42)
20
21 # Train a Predictive Model
22 model = RandomForestClassifier(random_state=42)
23 model.fit(X_train, y_train)
24
25 # Evaluate the Model
26 y_pred = model.predict(X_test)
27
28 accuracy = accuracy_score(y_test, y_pred)
29 print(f"Accuracy: {accuracy:.2f}")
30
31 classification_rep = classification_report(y_test, y_pred)
32 print("Classification Report:\n", classification_rep)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

powershell + - [ ] [X] ... ^ X

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Accuracy: 1.00

Classification Report:

	precision	recall	f1-score	support
0	1.00	1.00	1.00	10
1	1.00	1.00	1.00	9
2	1.00	1.00	1.00	11
accuracy			1.00	30
macro avg	1.00	1.00	1.00	30
weighted avg	1.00	1.00	1.00	30

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