Practical ___

Writeup:

Practical __

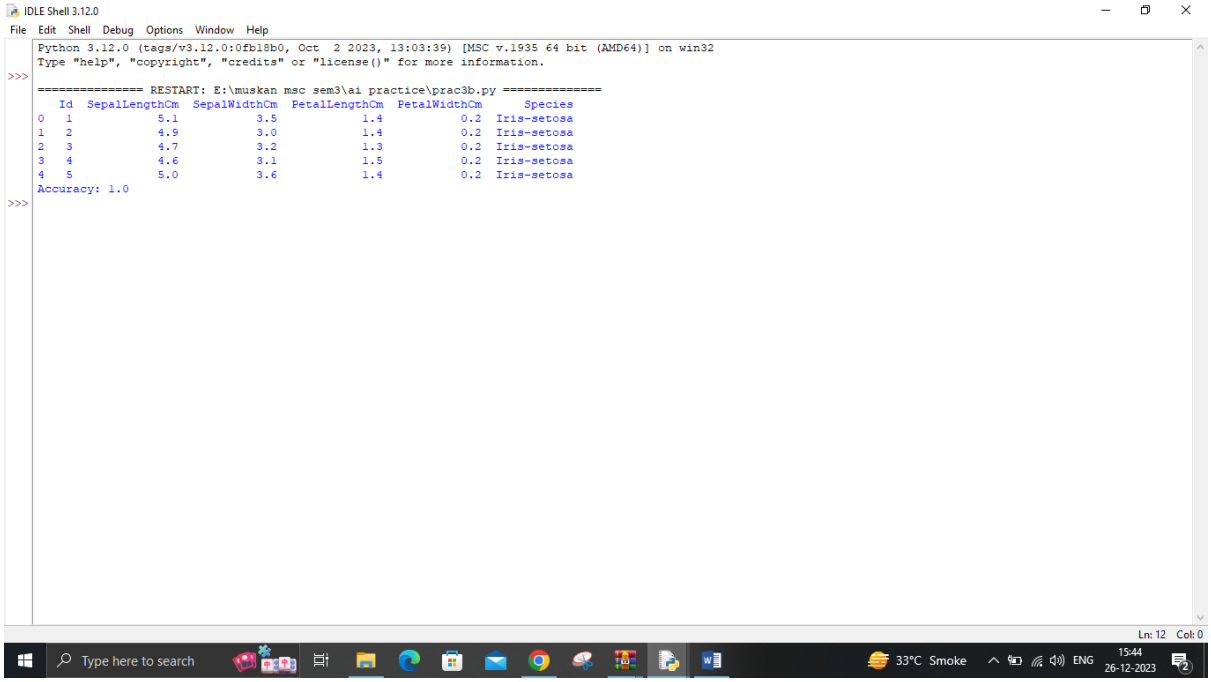
Aim:

Description:

Code:

```
import pandas as pd
from sklearn.datasets import load_iris
from sklearn.model_selection import train_test_split
from sklearn.naive_bayes import GaussianNB
from sklearn import metrics
# Load Iris dataset
file_path =("C:\\muskan\\iris.csv")
iris_data = pd.read_csv(file_path)
print(iris_data.head())
X = iris_data.drop('Species', axis=1)
# Features (excluding the 'Species' column)
y = iris_data['Species']
# Split the dataset into training and tes□ng sets
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.3, random_state=42)
# Create a Gaussian Naive Bayes classifier
classifier = GaussianNB()
# Train the classifier using the training data
classifier.fit(X_train, y_train)
# Make predic□ons on the test set
y_pred = classifier.predict(X_test)
# Calculate accuracy
accuracy = metrics.accuracy_score(y_test, y_pred)
print("Accuracy:", accuracy)
```

Output:


IDLE Shell 3.12.0
File Edit Shell Debug Options Window Help
Python 3.12.0 (tags/v3.12.0:0fb18b0, Oct 2 2023, 13:03:39) [MSC v.1935 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: E:\muskan msc sem3\ai practice\prac3b.py ==========
Id SepalLengthCm SepalWidthCm PetalLengthCm PetalWidthCm Species
0 1 5.1 3.5 1.4 0.2 Iris-setosa
1 2 4.9 3.0 1.4 0.2 Iris-setosa
2 3 4.7 3.2 1.3 0.2 Iris-setosa
3 4 4.6 3.1 1.5 0.2 Iris-setosa
4 5 5.0 3.6 1.4 0.2 Iris-setosa
Accuracy: 1.0
>>>
Ln: 12 Col: 0
Type here to search
33°C Smoke
ENG
15:44
26-12-2023