```python
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
from sklearn.model_selection import train_test_split
from sklearn.preprocessing import StandardScaler
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import accuracy_score, confusion_matrix, classification_report
from sklearn.datasets import load_iris, load_diabetes
import pandas as pd
from sklearn.model_selection import train_test_split, GridSearchCV
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import accuracy_score, confusion_matrix, classification_report
import seaborn as sns
import matplotlib.pyplot as plt
```

```python
from google.colab import files
uploaded = files.upload()
```

```
Choose Files   diabetes.csv
  • diabetes.csv(text/csv) - 23875 bytes, last modified: 4/7/2025 - 100% done
  Saving diabetes.csv to diabetes.csv
```

```python
df = pd.read_csv('diabetes.csv')
```

```python
X = df.drop('Outcome', axis=1)
y = df['Outcome']
```

```python
scaler = StandardScaler()
X_scaled = scaler.fit_transform(X)
```

```python
X_train, X_test, y_train, y_test = train_test_split(X_scaled, y, test_size=0.2, random_state=42)
```

```python
knn = KNeighborsClassifier(n_neighbors=5)
knn.fit(X_train, y_train)
```

```
▼ KNeighborsClassifier  ⓘ ?
  KNeighborsClassifier()
```

```python
y_pred = knn.predict(X_test)
```

```python
accuracy = accuracy_score(y_test, y_pred)
conf_matrix = confusion_matrix(y_test, y_pred)
```

```python
print("Accuracy Score:", accuracy)
print("Confusion Matrix:\n", conf_matrix)
```

```
Accuracy Score: 0.6883116883116883
Confusion Matrix:
 [[79 20]
 [28 27]]
```