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 1 import pandas as pd
 2 from mlxtend.plotting import plot_confusion_matrix
 3 from sklearn.preprocessing import OneHotEncoder
 4 from sklearn.preprocessing import StandardScaler
 5 from sklearn.svm import SVC
 6 from sklearn.metrics import confusion_matrix,
   accuracy_score
 7 from sklearn.model_selection import
   train_test_split
 8 from sklearn.compose import ColumnTransformer
 9 import matplotlib.pyplot as plt
10 ds = pd.read_csv('/Users/marreswaran/Desktop/MY
   PERSONAL/MACHINE LEARNING/LECTURES RAJKUMAR BHUNIA/
   CODE FILES AND DATA SETS/Project-3/heart.csv')
11 print(ds)
12 print(ds.isna().sum())
13 print(ds.head())
14 x = ds.iloc[:,:-1].values
15 y = ds.iloc[:,-1].values
16 print(x)
17 ct = ColumnTransformer(transformers=[('encoder',
   OneHotEncoder(),[1,2,5,6,8,10,11,12])],remainder='
   passthrough')
18 x = ct.fit_transform(x)
19 sc = StandardScaler()
20 x = sc.fit_transform(x)
21 print (x)
22 x_tr,x_te,y_tr,y_te=train_test_split(x,y,test_size=
   0.25,random_state=5)
23 classifier = SVC(kernel='linear',random_state=1)
24 classifier.fit(x_tr,y_tr)
25 ypred= classifier.predict(x_te)
26 cm=confusion_matrix(y_te,ypred)
27 acc = accuracy_score(y_te,ypred)
28 print(cm)
29 print(acc)
30 plot_confusion_matrix(cm)
31 plt.show()
32
```