import numpy as np

from sklearn.model\_selection import train\_test\_split

from sklearn.svm import SVC

from sklearn.metrics import classification\_report

X = np.array([[0, 1, 0],

[1, 0, 1],

[0, 0, 1],

[1, 1, 0]])

y = np.array([0, 1, 1, 0])

X\_train, X\_test, y\_train, y\_test = train\_test\_split(X, y, test\_size=0.2, random\_state=42)

classifier = SVC(kernel='linear')

classifier.fit(X\_train, y\_train)

y\_pred = classifier.predict(X\_test)

print("Classification Report:")

print(classification\_report(y\_test, y\_pred))

new\_food = np.array([[0, 1, 1]])

prediction = classifier.predict(new\_food)

print("Predicted class for the new food item:", prediction)