from sklearn.datasets import load\_iris

iris=load\_iris()

x=iris.data

y=iris.target

print(x[:5],y[:5])

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

xtrain,xtest,ytrain,ytest =train\_test\_split(x,y,test\_size=0.4,random\_state=1)

print(iris.data.shape)

print(len(xtrain))

print(len(ytest))

from sklearn.neighbors import KNeighborsClassifier

knn=KNeighborsClassifier(n\_neighbors=1)

knn.fit(xtrain,ytrain)

pred=knn.predict(xtest)

from sklearn import metrics

print("Accuracy",metrics.accuracy\_score(ytest,pred))

print(iris.target\_names[2])

ytestn=[iris.target\_names[i] for i in ytest]

predn=[iris.target\_names[i] for i in pred]

print("predicted Actual")

for i in range(len(pred)):

print(i," ",predn[i]," ",ytestn[i])