from sklearn.datasets import load\_iris,load\_breast\_cancer  
from sklearn.model\_selection import train\_test\_split  
from sklearn.neighbors import KNeighborsClassifier  
from sklearn.metrics import confusion\_matrix,precision\_score,recall\_score,f1\_score  
#load Iris data set  
iris=load\_iris()  
x=iris.data  
y=iris.target  
#split the dataset into training and testing sets  
x\_train,x\_test,y\_train,y\_test=train\_test\_split(x,y,test\_size=0.2,random\_state=42)  
#train the kNN  
knn=KNeighborsClassifier()  
knn.fit(x\_train,y\_train)  
#predection  
y\_pred=knn.predict(x\_test)  
#calculate confusion matrix  
cm=confusion\_matrix(y\_test,y\_pred)  
print("Confusion Matrix:")  
print(cm)  
#calculate precision,recall,f\_measyre  
precision=precision\_score(y\_test,y\_pred,average='macro')  
recall=recall\_score(y\_test,y\_pred,average='macro')  
f1=f1\_score(y\_test,y\_pred,average='macro')  
print("precision",precision)  
print("recall",recall)  
print("f\_measure",f1)