from sklearn import metrics

cl\_tab = crosstab(c1, y, rownames=['cl'], colnames=['y'])

cl\_tab = cl\_tab.as\_matrix()

cl\_numpyarr = cl\_tab.reshape((-1,1))

print(crosstab(c1, y, rownames=['cl'], colnames=['y']))

acc = metrics.silhouette\_score(crosstab(c1, y, rownames=['cl'], colnames=['y']), y, metric='euclidean')

print(acc)

from sklearn import metrics

c2 = c2.reshape(-1,1)

acc2 = metrics.silhouette\_score(c2, y, metric='euclidean')

print(acc2)

from sklearn import metrics

c3 = c3.reshape(-1,1)

acc3 = metrics.silhouette\_score(c3, y, metric='euclidean')

print(acc3)

//needed to condense array with dnew = type procedure see lab 6 top of page code