import pandas as pd

import seaborn as sns

df=pd.read\_csv("Admission\_Predict.csv")

df

df.columns

df.shape

from sklearn.preprocessing import Binarizer

bi= Binarizer(threshold=0.75) #0.75 up 1 down 0

df['Chance of Admit ']=bi.fit\_transform(df[['Chance of Admit ']])

df.head()

x=df.drop('Chance of Admit ',axis=1)

y=df['Chance of Admit ']

x

y=y.astype('int')

y

sns.countplot(x=y)

y.value\_counts()

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

x\_train, x\_test, y\_train, y\_test = train\_test\_split(x,y,test\_size=0.25)

x\_test.shape

from sklearn.tree import DecisionTreeClassifier

classifier=DecisionTreeClassifier(random\_state=0)

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

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

result=pd.DataFrame({'actual':y\_test,'predicted':y\_pred})

from sklearn.metrics import ConfusionMatrixDisplay

from sklearn.metrics import accuracy\_score

from sklearn.metrics import classification\_report

ConfusionMatrixDisplay.from\_predictions(y\_test,y\_pred)

accuracy\_score(y\_test,y\_pred)

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