**import** pandas **as** pd

**import** seaborn **as** sb

df **=** pd**.**read\_csv("diabetes.csv")

In [3]:

df

x **=** df**.**drop('Outcome', axis **=** 1)

y **=** df['Outcome']

In [5]:

sb**.**countplot(x**=**y)

y**.**value\_counts()

*#Feature scaling*

**from** sklearn.preprocessing **import** MinMaxScaler

scaler **=** MinMaxScaler()

x\_scaled **=** scaler**.**fit\_transform(x)

In [8]:

*#Cross validation*

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

x\_train, x\_test, y\_train, y\_test **=** train\_test\_split(

x\_scaled,y,random\_state**=**0,test\_size**=**0.25)

x**.**shape

x\_train**.**shape

x\_test**.**shape

**from** sklearn.neighbors **import** KNeighborsClassifier

knn **=** KNeighborsClassifier(n\_neighbors**=**5)

knn**.**fit(x\_train,y\_train)

**from** sklearn.metrics **import** accuracy\_score, ConfusionMatrixDisplay

**from** sklearn.metrics **import** classification\_report

y\_pred **=** knn**.**predict(x\_test)

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

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