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In [1]: # design a svm classifier to predict breast cancer

# step 1 : Load the dataset from sklearn

from sklearn import datasets
cancer_data=datasets.load_breast_cancer()
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In [2]: # step 2: prepare x and y
x=cancer_data.data
y=cancer_data.target
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In [26]: # split the dataset into training and test dataset
from sklearn.model_selection import train_test_split
x_train,x_test,y_train,y_test=train_test_split(x,y,train_size=0.8,random_state=10)
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In [27]: # Step 4 : build the model
from sklearn import svm

# create an instance
clf=svm.SVC(kernel='poly')

#train the model
model=clf.fit(x_train,y_train)

#test the model
y_pred=model.predict(x_test)
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In [28]: # compute the accuracy of h=the model
from sklearn.metrics import accuracy_score,classification_report,confusion_matrix
print ("Accuracy:",accuracy_score(y_test,y_pred)*100)

Accuracy: 94.73684210526315
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In [ ]:
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