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#Instalamos la libreria tflearn
!pip install tflearn
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#Importamos todo lo que necesitamos de tflearn
import tflearn
from tflearn.layers.core import input_data, fully_connected
from tflearn.layers.estimator import regression
from tflearn.data_utils import to_categorical
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#Importamos el dataset y la funcion para separar el dataset en entrenamiento y prueba
from sklearn.datasets import load_breast_cancer
from sklearn.model_selection import train_test_split
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```
#Cargamos el dataset
breast_cancer = load_breast_cancer()
#Lo separamos en entrenamiento y prueba
X_train, X_test, Y_train, Y_test = train_test_split(breast_cancer.data, breast_cancer.target)
```

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#Convertimos las variables Y_train y Y_test en cateforicas de dos clases
Y_train = to_categorical(Y_train, nb_classes=2)
Y_test = to_categorical(Y_test, nb_classes=2)
```

```
#Definimos la estructura de la red neuronal
net = input_data(shape=[None, 30])
net = fully_connected(net, 32, activation='ReLU', regularizer='L2')
net = fully_connected(net, 32, activation='ReLU', regularizer='L2')
net = fully_connected(net, 2, activation='softmax')
net = regression(net, optimizer='sgd', learning_rate=0.001, loss='categorical_crossentropy')

model = tflearn.DNN(net)
```

```
#Entrenamos el modelo y lo validamos
model.fit(X_train,Y_train, validation_set=(X_test, Y_test), show_metric=True, n_epoch=100)
```