

Logistic Regression Algorithm: It's basically a binary class classification algorithm.

Pseudocode	Variable Description
for in range(n):	n is the number of epochs
totalError =0	
for each training sample x:	
$z = xw + c$	x is the matrix of inputs and w is the matrix of weights
$h = \text{sigmoid}(z)$	
$\text{error} = -y \log(h) - (1-y) \log(1-h)$	
totalError = totalError + error	
$dv = x(h-y)$	dv is the change of gradient by partial dedrivation
$w = w - dv * lr$ $c = c - (h-y)$	lr is the learning rate
if(i==0): print(totalError)	
elif(i+1 % 50 == 0): print(totalError)	
totalErrorForCurvePloting.append(totalError)	

Also show the accuracy (%) and error (%) by using testing dataset

Plot the **iteration** vs **training error** (totalError) curve