

$X[0] \leq 0.5$   
entropy = 0.811  
samples = 4  
value = [3, 1]

entropy = 0.0  
samples = 2  
value = [2, 0]

$X[1] \leq 0.5$   
entropy = 1.0  
samples = 2  
value = [1, 1]

entropy = 0.0  
samples = 1  
value = [0, 1]

entropy = 0.0  
samples = 1  
value = [1, 0]