

Question 1: Given the data below create a decision tree using (a) Gini index (b) Entropy as impurity criterion. Show all the steps (calculations) and draw the final decision tree. Target variable is denoted Y

X1	X2	X3	Y
8	yes	4	1
6	no	5	0
4	yes	1	0
8	no	2	1
9	no	1	0
3	no	7	1
7	yes	8	1