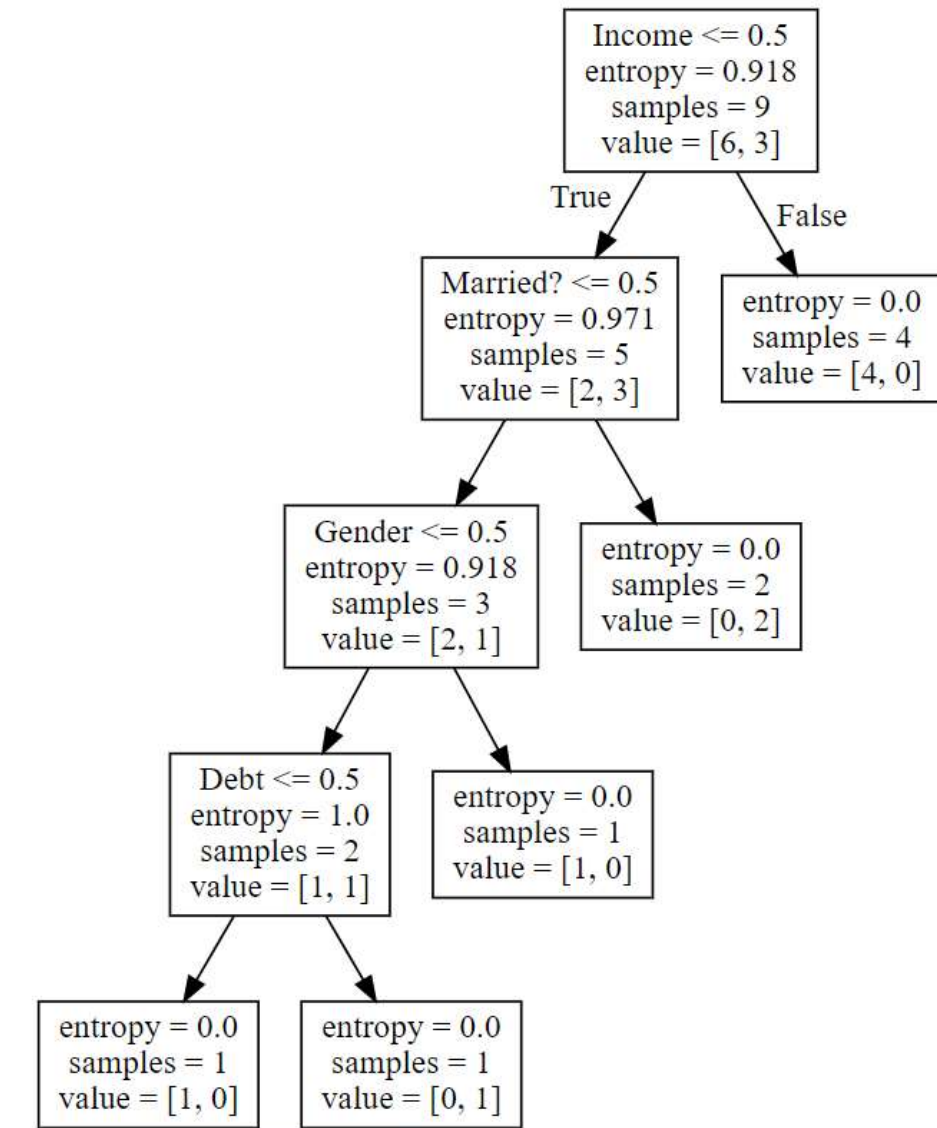


## CS539 – Machine Learning

## HW1- Part2

## Task 2-1

Decision tree plot:

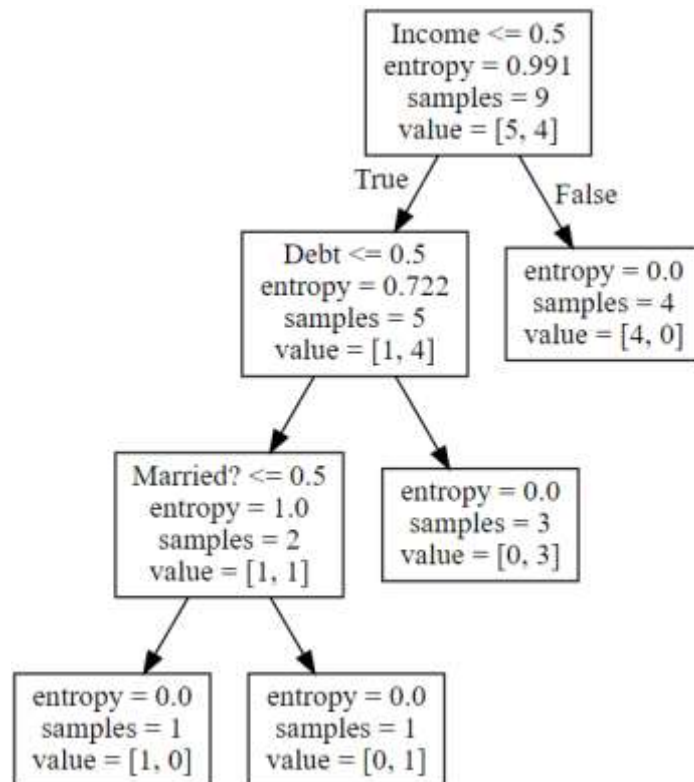


Applying the decision tree to predict the Credit Risk of Tom and Ana:

Name	Credit Risk
Tom	Low
Ana	Low

## Task 2-2

After changing Sofia's Credit Risk from 'Low' to 'High' I obtained the below decision tree



Observations:

If I change the Credit Risk of Sofia from 'Low' to 'High' the variable Gender is not the node of decision tree anymore.

I observed the variable 'Owns\_property' does not play any role in predicting the Credit Risk.