## QUICK QUESTION 5 (2/2 points)

**IMPORTANT NOTE:** When creating random forest models, you might still get different answers from the ones you see here even if you set the random seed. This has to do with different operating systems and the random forest implementation.

Let's see what happens if we set the seed to two different values and create two different random forest models.

First, set the seed to 100, and re-run the random forest model, exactly like we did in the video. What is the accuracy of the model?

0.6882353

$0.6882353$

**Answer:** 0.6882353

Now, set the seed to 200, and re-run the random forest model, exactly like we did in the video. What is the accuracy of this model?

0.7058824

$0.7058824$

**Answer:** 0.7058824

**EXPLANATION**

You can create the models and compute the accurracies with the following commands in R:

set.seed(100)

StevensForest = randomForest(Reverse ~ Circuit + Issue + Petitioner + Respondent + LowerCourt + Unconst, data = Train, ntree=200, nodesize=25 )

PredictForest = predict(StevensForest, newdata = Test)

table(Test$Reverse, PredictForest)

and then repeat it, but with set.seed(200) first.

As we see here, the random component of the random forest method can change the accuracy. The accuracy for a more stable dataset will not change very much, but a noisy dataset can be significantly affected by the random samples.

Check Save Hide Answer *You have used 1 of 4 submissions*

EdX is a non-profit created by founding partners Harvard and MIT whose mission is to bring the best of higher education to students of all ages anywhere in the world, wherever there is Internet access. EdX's free online MOOCs are interactive and subjects include computer science, public health, and artificial intelligence.