#install.packages("tree")

library(tree)

# predict Species from all other attributes

tree.irises = tree(Species ~ .,iris)

summary(tree.irises)

sink('iristree.txt')

tree.irises

sink()

plot(tree.irises)

text(tree.irises)

#try with training and test sets

#make random results reproducible

set.seed(12345)

#sample 120 rows (80%)

samp\_sz = 80

train = sample(1:nrow(iris), samp\_sz)

# test data set is other rows

iris.test = iris[-train,]

# train a mode on just the training data

tree.iristrain = tree(Species ~ .,iris, subset = train)

#check predictions

irispred = predict(tree.iristrain,iris.test,type="class")

#visually examine diffs between "ground truth" and predictions

iris.test$Species

irispred

#compare in a table

table(irispred,iris.test$Species)

#calculate your error rate

#decrease sample size and see how you do