# Assessing model

stats\_regtree=csaccuracy(testData[,"QS"],y\_regtree,mean(trainData[,"QS"]))

stats\_regtree

#pruned 0.02

stats\_regtree1=csaccuracy(testData[,"QS"],y\_ptree1,mean(trainData[,"QS"]))

stats\_regtree1

#pruned 0.05

stats\_regtree2=csaccuracy(testData[,"QS"],y\_ptree2,mean(trainData[,"QS"]))

stats\_regtree2

#pruned 0.1

stats\_regtree3=csaccuracy(testData[,"QS"],y\_ptree3,mean(trainData[,"QS"]))

stats\_regtree3

#NN #321,4 nodes,1 layer

stats\_NN=csaccuracy(testData[,"QS"],y\_NN,mean(trainData[,"QS"]))

stats\_NN

#NN #123,4 nodes,1 layer

stats\_NN1=csaccuracy(testData[,"QS"],y\_NN1,mean(trainData[,"QS"]))

stats\_NN1

#NN #888,4 nodes,1 layer

stats\_NN2=csaccuracy(testData[,"QS"],y\_NN2,mean(trainData[,"QS"]))

stats\_NN2

#NN #123,5 nodes,1 layer

stats\_NN1\_2=csaccuracy(testData[,"QS"],y\_NN1\_2,mean(trainData[,"QS"]))

stats\_NN1\_2

#NN #123,5 nodes,1 layer

stats\_NN2\_5=csaccuracy(testData[,"QS"],y\_NN2\_5,mean(trainData[,"QS"]))

stats\_NN2\_5

#Kmeans, seed#123

stats\_KM=csaccuracy(y\_km$actual,y\_km$QS,mean(trainData[,"QS"]))

stats\_KM

#Kmeans/regression 2 cluster as filter, CA removed

stats\_KMreg=csaccuracy(kmreg$actual,kmreg$predicted,mean(trainData[,"QS"]))

stats\_KMreg

#Kmeans/regression 2 cluster as filter FULL

stats\_KMregfull=csaccuracy(kmregfull$actual,kmregfull$predicted,mean(trainData[,"QS"]))

stats\_KMregfull

#Kmeans, seed#123

#Kmeans/regression 7 cluster as filter, CA removed

stats\_KMregv2=csaccuracy(kmregv2$actual,kmregv2$predicted,mean(trainData[,"QS"]))

stats\_KMregv2

#Kmeans/regression 7 cluster as filter FULL

stats\_KMregfullv2=csaccuracy(kmregfullv2$actual,kmregfullv2$predicted,mean(trainData[,"QS"]))

stats\_KMregfullv2

#KNN

stats\_knnm=csaccuracy(testData[,"QS"],y\_knnm,mean(trainData[,"QS"]))

stats\_knnm

#Gathering the predictive accuracy statistics

allstats=rbind(stats\_regtree

,stats\_regtree1

,stats\_regtree2

,stats\_regtree3

,stats\_NN

,stats\_NN1

,stats\_NN2)

allstats

rownames(allstats)[1:7]=c('RegTree','RegTree\_0.02','RegTree\_0.05'

,'RegTree\_0.1','NN\_1\_4\_#321','NN\_1\_4\_#123'

,'NN\_1\_4\_#888')

allstats