4FoldsExample.r

## Simple code to do k-Folds validation  
## You could use the caret package, but this is simple enough to implement  
## and you know exactly what the code is doing  
  
setwd("C:/Users/Tony/Dropbox/Rowan/DM2")  
names1=read.csv("names.csv",header=T,stringsAsFactors=T)  
names1

## name  
## 1 sue  
## 2 joe  
## 3 bob  
## 4 sam  
## 5 joanne  
## 6 ant  
## 7 taylor  
## 8 eric  
## 9 tyler  
## 10 emma  
## 11 pat  
## 12 justine

## Randomize rows of names1  
names1R<-names1[sample(nrow(names1)),1]  
folds <- cut(seq(1,nrow(names1)),breaks=4,labels=FALSE)  
df <- data.frame(folds,names1R)  
df

## folds names1R  
## 1 1 taylor  
## 2 1 eric  
## 3 1 tyler  
## 4 2 sue  
## 5 2 joanne  
## 6 2 pat  
## 7 3 joe  
## 8 3 emma  
## 9 3 sam  
## 10 4 justine  
## 11 4 bob  
## 12 4 ant

for(i in 1:4){  
 #Segement your data by fold using the which() function   
 testIndexes <- which(folds==i,arr.ind=TRUE)  
 testData <- df[testIndexes, ]  
 trainData <- df[-testIndexes, ]  
 #Use the test and train data partitions however you desire...  
 #We'll print them here, but we will generally use them to train and test models  
 print(trainData)  
 print(testData)  
 cat("\n")  
}

## folds names1R  
## 4 2 sue  
## 5 2 joanne  
## 6 2 pat  
## 7 3 joe  
## 8 3 emma  
## 9 3 sam  
## 10 4 justine  
## 11 4 bob  
## 12 4 ant  
## folds names1R  
## 1 1 taylor  
## 2 1 eric  
## 3 1 tyler  
##   
## folds names1R  
## 1 1 taylor  
## 2 1 eric  
## 3 1 tyler  
## 7 3 joe  
## 8 3 emma  
## 9 3 sam  
## 10 4 justine  
## 11 4 bob  
## 12 4 ant  
## folds names1R  
## 4 2 sue  
## 5 2 joanne  
## 6 2 pat  
##   
## folds names1R  
## 1 1 taylor  
## 2 1 eric  
## 3 1 tyler  
## 4 2 sue  
## 5 2 joanne  
## 6 2 pat  
## 10 4 justine  
## 11 4 bob  
## 12 4 ant  
## folds names1R  
## 7 3 joe  
## 8 3 emma  
## 9 3 sam  
##   
## folds names1R  
## 1 1 taylor  
## 2 1 eric  
## 3 1 tyler  
## 4 2 sue  
## 5 2 joanne  
## 6 2 pat  
## 7 3 joe  
## 8 3 emma  
## 9 3 sam  
## folds names1R  
## 10 4 justine  
## 11 4 bob  
## 12 4 ant