module_11.R

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2021-03-27

```
# tukey_multiple <- function(x) {    #Original Function from Canvas
#   outliers <- array(TRUE,dim=dim(x))
#   for (j in 1:ncol(x))
#   {
#     outliers[,j] <- outliers[,j] && tukey.outlier(x[,j])
#   }
#   outlier.vec <- vector(length=nrow(x))
#   for (i in 1:nrow(x))
#   {
#     outlier.vec[i] <- all(outliers[i,])
#   }
#   return(outlier.vec)
#   }

# num <- rnorm(10000, mean = 5000, sd = 1) #Generating 10000 numbers in a
normal distribution
#
# sample <- matrix(data = num, nrow = 100, ncol = 100, dimnames = NULL)
#Organizing the 10000 numbers in a 100x100 matrix
# sample
#
# tukey_multiple(sample)  #Cannot find the function 'tukey.outlier'
# debug(tukey_multiple(sample)) #Same result


library(funModeling)

## Loading required package: Hmisc

## Loading required package: lattice

## Loading required package: survival

## Loading required package: Formula

## Loading required package: ggplot2

##
## Attaching package: 'Hmisc'

## The following objects are masked from 'package:base':
##
##     format.pval, units
```

```
## funModeling v.1.9.4 :)
## Examples and tutorials at livebook.datascienceheroes.com
##  / Now in Spanish: librovivodecienciadedatos.ai

tukey_multiple1 <- function(x) {
  outliers <- array(TRUE,dim=dim(x))
  for (j in 1:ncol(x))
  {
    outliers[,j] <- outliers[,j] && tukey_outlier(x[,j])  #Had to replace
tukey.outlier() with tukey_outlier() from the funModeling package
  }
  outlier.vec <- vector(length=nrow(x))
  for (i in 1:nrow(x))
  {
    outlier.vec[i] <- all(outliers[i,])
  }
  return(outlier.vec)
  }

num <- rnorm(10000, mean = 5000, sd = 1) #Generating 10000 numbers in a
normal distribution

sample <- matrix(data = num, nrow = 100, ncol = 100, dimnames = NULL)
#Organizing the 10000 numbers in a 100x100 matrix

tukey_multiple1(sample) #There's an output now, but still not sure if the
function is operating properly...

##   [1] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [16] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [31] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [46] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [61] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [76] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE
TRUE TRUE
##  [91] TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRUE

# debug(tukey_multiple1(sample)) #Not sure why it's giving me an error here,
since tukey_multiple() is a function.
```