processData.R

belindaswanson

Sun Sep 21 13:23:24 2014

# This script assumes that:  
# 1. the data files have been downloaded and extracted  
# 2. you know the contents of each file  
# 3. you current directory is 'project'  
  
library(dplyr)

##   
## Attaching package: 'dplyr'  
##   
## The following objects are masked from 'package:stats':  
##   
## filter, lag  
##   
## The following objects are masked from 'package:base':  
##   
## intersect, setdiff, setequal, union

print("Current working directory: ")

## [1] "Current working directory: "

getwd()

## [1] "/Users/belindaswanson/Coursera/GettingAndCleaningData/project"

# Enter unzipped files directory  
#print("\n)  
# Enter the unzipped files' directory,   
# This directory is one level down from your current direcotry.\n")  
#unzipDir <- readline("Enter data directory name: ")  
unzipDir <- "UCI HAR Dataset"  
  
# Create directory if it does not exist  
dataDir <- paste(getwd(),"/data/",unzipDir,sep="")  
  
# Set workspace to unzipped data's directory  
setwd(dataDir)  
getwd()

## [1] "/Users/belindaswanson/Coursera/GettingAndCleaningData/project/data/UCI HAR Dataset"

print("The contents in the unzipped data's directory are:")

## [1] "The contents in the unzipped data's directory are:"

list.files(dataDir)

## [1] "activity\_labels.txt" "features\_info.txt" "features.txt"   
## [4] "README.txt" "test" "train"

# Read in activity\_lables.txt,  
# mapping activity number to activity description  
activityMap <- read.table("activity\_labels.txt",  
 header = FALSE,  
 sep = " ",  
 col.names = c("activityid", "activityname"),  
 colClasses = c("factor", "factor"),  
 strip.white = TRUE)  
# Confirm data are read in correctly  
activityMap

## activityid activityname  
## 1 1 WALKING  
## 2 2 WALKING\_UPSTAIRS  
## 3 3 WALKING\_DOWNSTAIRS  
## 4 4 SITTING  
## 5 5 STANDING  
## 6 6 LAYING

# Read in features.txt, a two column file that contains  
# the variable number and the variable name.  
# The variable name vector will be used later as  
# column headings when reading in the X\_test & X\_train data sets.  
features <- read.table("features.txt",  
 header = FALSE,  
 sep = " ",  
 col.names = c("featureid", "feature"),  
 colClasses = c("factor", "factor"),  
 strip.white = TRUE)  
# Confirm data are read in correctly  
head(features,n=2)

## featureid feature  
## 1 1 tBodyAcc-mean()-X  
## 2 2 tBodyAcc-mean()-Y

tail(features,n=2)

## featureid feature  
## 560 560 angle(Y,gravityMean)  
## 561 561 angle(Z,gravityMean)

# Before we read in the other data sets,  
# we need to create the column name vector for the X-day based on  
# vector of features$featureName.  
# The features$feature contain odd characters.  
# - We will remove "()";  
# - We will remove "-";  
# - We will remove "(";  
# - We will remove ")";  
# - replace "," with "\_" so as not confuse a csv file later on;  
# We will keep the irregular upper & lower cases   
# to make the long feature names more readable.  
varnames <- gsub("\\(","",features$feature)  
varnames <- gsub("\\)","",varnames)  
varnames <- gsub("-","",varnames)  
varnames <- gsub(",","\_",varnames)  
print(varnames)

## [1] "tBodyAccmeanX"   
## [2] "tBodyAccmeanY"   
## [3] "tBodyAccmeanZ"   
## [4] "tBodyAccstdX"   
## [5] "tBodyAccstdY"   
## [6] "tBodyAccstdZ"   
## [7] "tBodyAccmadX"   
## [8] "tBodyAccmadY"   
## [9] "tBodyAccmadZ"   
## [10] "tBodyAccmaxX"   
## [11] "tBodyAccmaxY"   
## [12] "tBodyAccmaxZ"   
## [13] "tBodyAccminX"   
## [14] "tBodyAccminY"   
## [15] "tBodyAccminZ"   
## [16] "tBodyAccsma"   
## [17] "tBodyAccenergyX"   
## [18] "tBodyAccenergyY"   
## [19] "tBodyAccenergyZ"   
## [20] "tBodyAcciqrX"   
## [21] "tBodyAcciqrY"   
## [22] "tBodyAcciqrZ"   
## [23] "tBodyAccentropyX"   
## [24] "tBodyAccentropyY"   
## [25] "tBodyAccentropyZ"   
## [26] "tBodyAccarCoeffX\_1"   
## [27] "tBodyAccarCoeffX\_2"   
## [28] "tBodyAccarCoeffX\_3"   
## [29] "tBodyAccarCoeffX\_4"   
## [30] "tBodyAccarCoeffY\_1"   
## [31] "tBodyAccarCoeffY\_2"   
## [32] "tBodyAccarCoeffY\_3"   
## [33] "tBodyAccarCoeffY\_4"   
## [34] "tBodyAccarCoeffZ\_1"   
## [35] "tBodyAccarCoeffZ\_2"   
## [36] "tBodyAccarCoeffZ\_3"   
## [37] "tBodyAccarCoeffZ\_4"   
## [38] "tBodyAcccorrelationX\_Y"   
## [39] "tBodyAcccorrelationX\_Z"   
## [40] "tBodyAcccorrelationY\_Z"   
## [41] "tGravityAccmeanX"   
## [42] "tGravityAccmeanY"   
## [43] "tGravityAccmeanZ"   
## [44] "tGravityAccstdX"   
## [45] "tGravityAccstdY"   
## [46] "tGravityAccstdZ"   
## [47] "tGravityAccmadX"   
## [48] "tGravityAccmadY"   
## [49] "tGravityAccmadZ"   
## [50] "tGravityAccmaxX"   
## [51] "tGravityAccmaxY"   
## [52] "tGravityAccmaxZ"   
## [53] "tGravityAccminX"   
## [54] "tGravityAccminY"   
## [55] "tGravityAccminZ"   
## [56] "tGravityAccsma"   
## [57] "tGravityAccenergyX"   
## [58] "tGravityAccenergyY"   
## [59] "tGravityAccenergyZ"   
## [60] "tGravityAcciqrX"   
## [61] "tGravityAcciqrY"   
## [62] "tGravityAcciqrZ"   
## [63] "tGravityAccentropyX"   
## [64] "tGravityAccentropyY"   
## [65] "tGravityAccentropyZ"   
## [66] "tGravityAccarCoeffX\_1"   
## [67] "tGravityAccarCoeffX\_2"   
## [68] "tGravityAccarCoeffX\_3"   
## [69] "tGravityAccarCoeffX\_4"   
## [70] "tGravityAccarCoeffY\_1"   
## [71] "tGravityAccarCoeffY\_2"   
## [72] "tGravityAccarCoeffY\_3"   
## [73] "tGravityAccarCoeffY\_4"   
## [74] "tGravityAccarCoeffZ\_1"   
## [75] "tGravityAccarCoeffZ\_2"   
## [76] "tGravityAccarCoeffZ\_3"   
## [77] "tGravityAccarCoeffZ\_4"   
## [78] "tGravityAcccorrelationX\_Y"   
## [79] "tGravityAcccorrelationX\_Z"   
## [80] "tGravityAcccorrelationY\_Z"   
## [81] "tBodyAccJerkmeanX"   
## [82] "tBodyAccJerkmeanY"   
## [83] "tBodyAccJerkmeanZ"   
## [84] "tBodyAccJerkstdX"   
## [85] "tBodyAccJerkstdY"   
## [86] "tBodyAccJerkstdZ"   
## [87] "tBodyAccJerkmadX"   
## [88] "tBodyAccJerkmadY"   
## [89] "tBodyAccJerkmadZ"   
## [90] "tBodyAccJerkmaxX"   
## [91] "tBodyAccJerkmaxY"   
## [92] "tBodyAccJerkmaxZ"   
## [93] "tBodyAccJerkminX"   
## [94] "tBodyAccJerkminY"   
## [95] "tBodyAccJerkminZ"   
## [96] "tBodyAccJerksma"   
## [97] "tBodyAccJerkenergyX"   
## [98] "tBodyAccJerkenergyY"   
## [99] "tBodyAccJerkenergyZ"   
## [100] "tBodyAccJerkiqrX"   
## [101] "tBodyAccJerkiqrY"   
## [102] "tBodyAccJerkiqrZ"   
## [103] "tBodyAccJerkentropyX"   
## [104] "tBodyAccJerkentropyY"   
## [105] "tBodyAccJerkentropyZ"   
## [106] "tBodyAccJerkarCoeffX\_1"   
## [107] "tBodyAccJerkarCoeffX\_2"   
## [108] "tBodyAccJerkarCoeffX\_3"   
## [109] "tBodyAccJerkarCoeffX\_4"   
## [110] "tBodyAccJerkarCoeffY\_1"   
## [111] "tBodyAccJerkarCoeffY\_2"   
## [112] "tBodyAccJerkarCoeffY\_3"   
## [113] "tBodyAccJerkarCoeffY\_4"   
## [114] "tBodyAccJerkarCoeffZ\_1"   
## [115] "tBodyAccJerkarCoeffZ\_2"   
## [116] "tBodyAccJerkarCoeffZ\_3"   
## [117] "tBodyAccJerkarCoeffZ\_4"   
## [118] "tBodyAccJerkcorrelationX\_Y"   
## [119] "tBodyAccJerkcorrelationX\_Z"   
## [120] "tBodyAccJerkcorrelationY\_Z"   
## [121] "tBodyGyromeanX"   
## [122] "tBodyGyromeanY"   
## [123] "tBodyGyromeanZ"   
## [124] "tBodyGyrostdX"   
## [125] "tBodyGyrostdY"   
## [126] "tBodyGyrostdZ"   
## [127] "tBodyGyromadX"   
## [128] "tBodyGyromadY"   
## [129] "tBodyGyromadZ"   
## [130] "tBodyGyromaxX"   
## [131] "tBodyGyromaxY"   
## [132] "tBodyGyromaxZ"   
## [133] "tBodyGyrominX"   
## [134] "tBodyGyrominY"   
## [135] "tBodyGyrominZ"   
## [136] "tBodyGyrosma"   
## [137] "tBodyGyroenergyX"   
## [138] "tBodyGyroenergyY"   
## [139] "tBodyGyroenergyZ"   
## [140] "tBodyGyroiqrX"   
## [141] "tBodyGyroiqrY"   
## [142] "tBodyGyroiqrZ"   
## [143] "tBodyGyroentropyX"   
## [144] "tBodyGyroentropyY"   
## [145] "tBodyGyroentropyZ"   
## [146] "tBodyGyroarCoeffX\_1"   
## [147] "tBodyGyroarCoeffX\_2"   
## [148] "tBodyGyroarCoeffX\_3"   
## [149] "tBodyGyroarCoeffX\_4"   
## [150] "tBodyGyroarCoeffY\_1"   
## [151] "tBodyGyroarCoeffY\_2"   
## [152] "tBodyGyroarCoeffY\_3"   
## [153] "tBodyGyroarCoeffY\_4"   
## [154] "tBodyGyroarCoeffZ\_1"   
## [155] "tBodyGyroarCoeffZ\_2"   
## [156] "tBodyGyroarCoeffZ\_3"   
## [157] "tBodyGyroarCoeffZ\_4"   
## [158] "tBodyGyrocorrelationX\_Y"   
## [159] "tBodyGyrocorrelationX\_Z"   
## [160] "tBodyGyrocorrelationY\_Z"   
## [161] "tBodyGyroJerkmeanX"   
## [162] "tBodyGyroJerkmeanY"   
## [163] "tBodyGyroJerkmeanZ"   
## [164] "tBodyGyroJerkstdX"   
## [165] "tBodyGyroJerkstdY"   
## [166] "tBodyGyroJerkstdZ"   
## [167] "tBodyGyroJerkmadX"   
## [168] "tBodyGyroJerkmadY"   
## [169] "tBodyGyroJerkmadZ"   
## [170] "tBodyGyroJerkmaxX"   
## [171] "tBodyGyroJerkmaxY"   
## [172] "tBodyGyroJerkmaxZ"   
## [173] "tBodyGyroJerkminX"   
## [174] "tBodyGyroJerkminY"   
## [175] "tBodyGyroJerkminZ"   
## [176] "tBodyGyroJerksma"   
## [177] "tBodyGyroJerkenergyX"   
## [178] "tBodyGyroJerkenergyY"   
## [179] "tBodyGyroJerkenergyZ"   
## [180] "tBodyGyroJerkiqrX"   
## [181] "tBodyGyroJerkiqrY"   
## [182] "tBodyGyroJerkiqrZ"   
## [183] "tBodyGyroJerkentropyX"   
## [184] "tBodyGyroJerkentropyY"   
## [185] "tBodyGyroJerkentropyZ"   
## [186] "tBodyGyroJerkarCoeffX\_1"   
## [187] "tBodyGyroJerkarCoeffX\_2"   
## [188] "tBodyGyroJerkarCoeffX\_3"   
## [189] "tBodyGyroJerkarCoeffX\_4"   
## [190] "tBodyGyroJerkarCoeffY\_1"   
## [191] "tBodyGyroJerkarCoeffY\_2"   
## [192] "tBodyGyroJerkarCoeffY\_3"   
## [193] "tBodyGyroJerkarCoeffY\_4"   
## [194] "tBodyGyroJerkarCoeffZ\_1"   
## [195] "tBodyGyroJerkarCoeffZ\_2"   
## [196] "tBodyGyroJerkarCoeffZ\_3"   
## [197] "tBodyGyroJerkarCoeffZ\_4"   
## [198] "tBodyGyroJerkcorrelationX\_Y"   
## [199] "tBodyGyroJerkcorrelationX\_Z"   
## [200] "tBodyGyroJerkcorrelationY\_Z"   
## [201] "tBodyAccMagmean"   
## [202] "tBodyAccMagstd"   
## [203] "tBodyAccMagmad"   
## [204] "tBodyAccMagmax"   
## [205] "tBodyAccMagmin"   
## [206] "tBodyAccMagsma"   
## [207] "tBodyAccMagenergy"   
## [208] "tBodyAccMagiqr"   
## [209] "tBodyAccMagentropy"   
## [210] "tBodyAccMagarCoeff1"   
## [211] "tBodyAccMagarCoeff2"   
## [212] "tBodyAccMagarCoeff3"   
## [213] "tBodyAccMagarCoeff4"   
## [214] "tGravityAccMagmean"   
## [215] "tGravityAccMagstd"   
## [216] "tGravityAccMagmad"   
## [217] "tGravityAccMagmax"   
## [218] "tGravityAccMagmin"   
## [219] "tGravityAccMagsma"   
## [220] "tGravityAccMagenergy"   
## [221] "tGravityAccMagiqr"   
## [222] "tGravityAccMagentropy"   
## [223] "tGravityAccMagarCoeff1"   
## [224] "tGravityAccMagarCoeff2"   
## [225] "tGravityAccMagarCoeff3"   
## [226] "tGravityAccMagarCoeff4"   
## [227] "tBodyAccJerkMagmean"   
## [228] "tBodyAccJerkMagstd"   
## [229] "tBodyAccJerkMagmad"   
## [230] "tBodyAccJerkMagmax"   
## [231] "tBodyAccJerkMagmin"   
## [232] "tBodyAccJerkMagsma"   
## [233] "tBodyAccJerkMagenergy"   
## [234] "tBodyAccJerkMagiqr"   
## [235] "tBodyAccJerkMagentropy"   
## [236] "tBodyAccJerkMagarCoeff1"   
## [237] "tBodyAccJerkMagarCoeff2"   
## [238] "tBodyAccJerkMagarCoeff3"   
## [239] "tBodyAccJerkMagarCoeff4"   
## [240] "tBodyGyroMagmean"   
## [241] "tBodyGyroMagstd"   
## [242] "tBodyGyroMagmad"   
## [243] "tBodyGyroMagmax"   
## [244] "tBodyGyroMagmin"   
## [245] "tBodyGyroMagsma"   
## [246] "tBodyGyroMagenergy"   
## [247] "tBodyGyroMagiqr"   
## [248] "tBodyGyroMagentropy"   
## [249] "tBodyGyroMagarCoeff1"   
## [250] "tBodyGyroMagarCoeff2"   
## [251] "tBodyGyroMagarCoeff3"   
## [252] "tBodyGyroMagarCoeff4"   
## [253] "tBodyGyroJerkMagmean"   
## [254] "tBodyGyroJerkMagstd"   
## [255] "tBodyGyroJerkMagmad"   
## [256] "tBodyGyroJerkMagmax"   
## [257] "tBodyGyroJerkMagmin"   
## [258] "tBodyGyroJerkMagsma"   
## [259] "tBodyGyroJerkMagenergy"   
## [260] "tBodyGyroJerkMagiqr"   
## [261] "tBodyGyroJerkMagentropy"   
## [262] "tBodyGyroJerkMagarCoeff1"   
## [263] "tBodyGyroJerkMagarCoeff2"   
## [264] "tBodyGyroJerkMagarCoeff3"   
## [265] "tBodyGyroJerkMagarCoeff4"   
## [266] "fBodyAccmeanX"   
## [267] "fBodyAccmeanY"   
## [268] "fBodyAccmeanZ"   
## [269] "fBodyAccstdX"   
## [270] "fBodyAccstdY"   
## [271] "fBodyAccstdZ"   
## [272] "fBodyAccmadX"   
## [273] "fBodyAccmadY"   
## [274] "fBodyAccmadZ"   
## [275] "fBodyAccmaxX"   
## [276] "fBodyAccmaxY"   
## [277] "fBodyAccmaxZ"   
## [278] "fBodyAccminX"   
## [279] "fBodyAccminY"   
## [280] "fBodyAccminZ"   
## [281] "fBodyAccsma"   
## [282] "fBodyAccenergyX"   
## [283] "fBodyAccenergyY"   
## [284] "fBodyAccenergyZ"   
## [285] "fBodyAcciqrX"   
## [286] "fBodyAcciqrY"   
## [287] "fBodyAcciqrZ"   
## [288] "fBodyAccentropyX"   
## [289] "fBodyAccentropyY"   
## [290] "fBodyAccentropyZ"   
## [291] "fBodyAccmaxIndsX"   
## [292] "fBodyAccmaxIndsY"   
## [293] "fBodyAccmaxIndsZ"   
## [294] "fBodyAccmeanFreqX"   
## [295] "fBodyAccmeanFreqY"   
## [296] "fBodyAccmeanFreqZ"   
## [297] "fBodyAccskewnessX"   
## [298] "fBodyAcckurtosisX"   
## [299] "fBodyAccskewnessY"   
## [300] "fBodyAcckurtosisY"   
## [301] "fBodyAccskewnessZ"   
## [302] "fBodyAcckurtosisZ"   
## [303] "fBodyAccbandsEnergy1\_8"   
## [304] "fBodyAccbandsEnergy9\_16"   
## [305] "fBodyAccbandsEnergy17\_24"   
## [306] "fBodyAccbandsEnergy25\_32"   
## [307] "fBodyAccbandsEnergy33\_40"   
## [308] "fBodyAccbandsEnergy41\_48"   
## [309] "fBodyAccbandsEnergy49\_56"   
## [310] "fBodyAccbandsEnergy57\_64"   
## [311] "fBodyAccbandsEnergy1\_16"   
## [312] "fBodyAccbandsEnergy17\_32"   
## [313] "fBodyAccbandsEnergy33\_48"   
## [314] "fBodyAccbandsEnergy49\_64"   
## [315] "fBodyAccbandsEnergy1\_24"   
## [316] "fBodyAccbandsEnergy25\_48"   
## [317] "fBodyAccbandsEnergy1\_8"   
## [318] "fBodyAccbandsEnergy9\_16"   
## [319] "fBodyAccbandsEnergy17\_24"   
## [320] "fBodyAccbandsEnergy25\_32"   
## [321] "fBodyAccbandsEnergy33\_40"   
## [322] "fBodyAccbandsEnergy41\_48"   
## [323] "fBodyAccbandsEnergy49\_56"   
## [324] "fBodyAccbandsEnergy57\_64"   
## [325] "fBodyAccbandsEnergy1\_16"   
## [326] "fBodyAccbandsEnergy17\_32"   
## [327] "fBodyAccbandsEnergy33\_48"   
## [328] "fBodyAccbandsEnergy49\_64"   
## [329] "fBodyAccbandsEnergy1\_24"   
## [330] "fBodyAccbandsEnergy25\_48"   
## [331] "fBodyAccbandsEnergy1\_8"   
## [332] "fBodyAccbandsEnergy9\_16"   
## [333] "fBodyAccbandsEnergy17\_24"   
## [334] "fBodyAccbandsEnergy25\_32"   
## [335] "fBodyAccbandsEnergy33\_40"   
## [336] "fBodyAccbandsEnergy41\_48"   
## [337] "fBodyAccbandsEnergy49\_56"   
## [338] "fBodyAccbandsEnergy57\_64"   
## [339] "fBodyAccbandsEnergy1\_16"   
## [340] "fBodyAccbandsEnergy17\_32"   
## [341] "fBodyAccbandsEnergy33\_48"   
## [342] "fBodyAccbandsEnergy49\_64"   
## [343] "fBodyAccbandsEnergy1\_24"   
## [344] "fBodyAccbandsEnergy25\_48"   
## [345] "fBodyAccJerkmeanX"   
## [346] "fBodyAccJerkmeanY"   
## [347] "fBodyAccJerkmeanZ"   
## [348] "fBodyAccJerkstdX"   
## [349] "fBodyAccJerkstdY"   
## [350] "fBodyAccJerkstdZ"   
## [351] "fBodyAccJerkmadX"   
## [352] "fBodyAccJerkmadY"   
## [353] "fBodyAccJerkmadZ"   
## [354] "fBodyAccJerkmaxX"   
## [355] "fBodyAccJerkmaxY"   
## [356] "fBodyAccJerkmaxZ"   
## [357] "fBodyAccJerkminX"   
## [358] "fBodyAccJerkminY"   
## [359] "fBodyAccJerkminZ"   
## [360] "fBodyAccJerksma"   
## [361] "fBodyAccJerkenergyX"   
## [362] "fBodyAccJerkenergyY"   
## [363] "fBodyAccJerkenergyZ"   
## [364] "fBodyAccJerkiqrX"   
## [365] "fBodyAccJerkiqrY"   
## [366] "fBodyAccJerkiqrZ"   
## [367] "fBodyAccJerkentropyX"   
## [368] "fBodyAccJerkentropyY"   
## [369] "fBodyAccJerkentropyZ"   
## [370] "fBodyAccJerkmaxIndsX"   
## [371] "fBodyAccJerkmaxIndsY"   
## [372] "fBodyAccJerkmaxIndsZ"   
## [373] "fBodyAccJerkmeanFreqX"   
## [374] "fBodyAccJerkmeanFreqY"   
## [375] "fBodyAccJerkmeanFreqZ"   
## [376] "fBodyAccJerkskewnessX"   
## [377] "fBodyAccJerkkurtosisX"   
## [378] "fBodyAccJerkskewnessY"   
## [379] "fBodyAccJerkkurtosisY"   
## [380] "fBodyAccJerkskewnessZ"   
## [381] "fBodyAccJerkkurtosisZ"   
## [382] "fBodyAccJerkbandsEnergy1\_8"   
## [383] "fBodyAccJerkbandsEnergy9\_16"   
## [384] "fBodyAccJerkbandsEnergy17\_24"   
## [385] "fBodyAccJerkbandsEnergy25\_32"   
## [386] "fBodyAccJerkbandsEnergy33\_40"   
## [387] "fBodyAccJerkbandsEnergy41\_48"   
## [388] "fBodyAccJerkbandsEnergy49\_56"   
## [389] "fBodyAccJerkbandsEnergy57\_64"   
## [390] "fBodyAccJerkbandsEnergy1\_16"   
## [391] "fBodyAccJerkbandsEnergy17\_32"   
## [392] "fBodyAccJerkbandsEnergy33\_48"   
## [393] "fBodyAccJerkbandsEnergy49\_64"   
## [394] "fBodyAccJerkbandsEnergy1\_24"   
## [395] "fBodyAccJerkbandsEnergy25\_48"   
## [396] "fBodyAccJerkbandsEnergy1\_8"   
## [397] "fBodyAccJerkbandsEnergy9\_16"   
## [398] "fBodyAccJerkbandsEnergy17\_24"   
## [399] "fBodyAccJerkbandsEnergy25\_32"   
## [400] "fBodyAccJerkbandsEnergy33\_40"   
## [401] "fBodyAccJerkbandsEnergy41\_48"   
## [402] "fBodyAccJerkbandsEnergy49\_56"   
## [403] "fBodyAccJerkbandsEnergy57\_64"   
## [404] "fBodyAccJerkbandsEnergy1\_16"   
## [405] "fBodyAccJerkbandsEnergy17\_32"   
## [406] "fBodyAccJerkbandsEnergy33\_48"   
## [407] "fBodyAccJerkbandsEnergy49\_64"   
## [408] "fBodyAccJerkbandsEnergy1\_24"   
## [409] "fBodyAccJerkbandsEnergy25\_48"   
## [410] "fBodyAccJerkbandsEnergy1\_8"   
## [411] "fBodyAccJerkbandsEnergy9\_16"   
## [412] "fBodyAccJerkbandsEnergy17\_24"   
## [413] "fBodyAccJerkbandsEnergy25\_32"   
## [414] "fBodyAccJerkbandsEnergy33\_40"   
## [415] "fBodyAccJerkbandsEnergy41\_48"   
## [416] "fBodyAccJerkbandsEnergy49\_56"   
## [417] "fBodyAccJerkbandsEnergy57\_64"   
## [418] "fBodyAccJerkbandsEnergy1\_16"   
## [419] "fBodyAccJerkbandsEnergy17\_32"   
## [420] "fBodyAccJerkbandsEnergy33\_48"   
## [421] "fBodyAccJerkbandsEnergy49\_64"   
## [422] "fBodyAccJerkbandsEnergy1\_24"   
## [423] "fBodyAccJerkbandsEnergy25\_48"   
## [424] "fBodyGyromeanX"   
## [425] "fBodyGyromeanY"   
## [426] "fBodyGyromeanZ"   
## [427] "fBodyGyrostdX"   
## [428] "fBodyGyrostdY"   
## [429] "fBodyGyrostdZ"   
## [430] "fBodyGyromadX"   
## [431] "fBodyGyromadY"   
## [432] "fBodyGyromadZ"   
## [433] "fBodyGyromaxX"   
## [434] "fBodyGyromaxY"   
## [435] "fBodyGyromaxZ"   
## [436] "fBodyGyrominX"   
## [437] "fBodyGyrominY"   
## [438] "fBodyGyrominZ"   
## [439] "fBodyGyrosma"   
## [440] "fBodyGyroenergyX"   
## [441] "fBodyGyroenergyY"   
## [442] "fBodyGyroenergyZ"   
## [443] "fBodyGyroiqrX"   
## [444] "fBodyGyroiqrY"   
## [445] "fBodyGyroiqrZ"   
## [446] "fBodyGyroentropyX"   
## [447] "fBodyGyroentropyY"   
## [448] "fBodyGyroentropyZ"   
## [449] "fBodyGyromaxIndsX"   
## [450] "fBodyGyromaxIndsY"   
## [451] "fBodyGyromaxIndsZ"   
## [452] "fBodyGyromeanFreqX"   
## [453] "fBodyGyromeanFreqY"   
## [454] "fBodyGyromeanFreqZ"   
## [455] "fBodyGyroskewnessX"   
## [456] "fBodyGyrokurtosisX"   
## [457] "fBodyGyroskewnessY"   
## [458] "fBodyGyrokurtosisY"   
## [459] "fBodyGyroskewnessZ"   
## [460] "fBodyGyrokurtosisZ"   
## [461] "fBodyGyrobandsEnergy1\_8"   
## [462] "fBodyGyrobandsEnergy9\_16"   
## [463] "fBodyGyrobandsEnergy17\_24"   
## [464] "fBodyGyrobandsEnergy25\_32"   
## [465] "fBodyGyrobandsEnergy33\_40"   
## [466] "fBodyGyrobandsEnergy41\_48"   
## [467] "fBodyGyrobandsEnergy49\_56"   
## [468] "fBodyGyrobandsEnergy57\_64"   
## [469] "fBodyGyrobandsEnergy1\_16"   
## [470] "fBodyGyrobandsEnergy17\_32"   
## [471] "fBodyGyrobandsEnergy33\_48"   
## [472] "fBodyGyrobandsEnergy49\_64"   
## [473] "fBodyGyrobandsEnergy1\_24"   
## [474] "fBodyGyrobandsEnergy25\_48"   
## [475] "fBodyGyrobandsEnergy1\_8"   
## [476] "fBodyGyrobandsEnergy9\_16"   
## [477] "fBodyGyrobandsEnergy17\_24"   
## [478] "fBodyGyrobandsEnergy25\_32"   
## [479] "fBodyGyrobandsEnergy33\_40"   
## [480] "fBodyGyrobandsEnergy41\_48"   
## [481] "fBodyGyrobandsEnergy49\_56"   
## [482] "fBodyGyrobandsEnergy57\_64"   
## [483] "fBodyGyrobandsEnergy1\_16"   
## [484] "fBodyGyrobandsEnergy17\_32"   
## [485] "fBodyGyrobandsEnergy33\_48"   
## [486] "fBodyGyrobandsEnergy49\_64"   
## [487] "fBodyGyrobandsEnergy1\_24"   
## [488] "fBodyGyrobandsEnergy25\_48"   
## [489] "fBodyGyrobandsEnergy1\_8"   
## [490] "fBodyGyrobandsEnergy9\_16"   
## [491] "fBodyGyrobandsEnergy17\_24"   
## [492] "fBodyGyrobandsEnergy25\_32"   
## [493] "fBodyGyrobandsEnergy33\_40"   
## [494] "fBodyGyrobandsEnergy41\_48"   
## [495] "fBodyGyrobandsEnergy49\_56"   
## [496] "fBodyGyrobandsEnergy57\_64"   
## [497] "fBodyGyrobandsEnergy1\_16"   
## [498] "fBodyGyrobandsEnergy17\_32"   
## [499] "fBodyGyrobandsEnergy33\_48"   
## [500] "fBodyGyrobandsEnergy49\_64"   
## [501] "fBodyGyrobandsEnergy1\_24"   
## [502] "fBodyGyrobandsEnergy25\_48"   
## [503] "fBodyAccMagmean"   
## [504] "fBodyAccMagstd"   
## [505] "fBodyAccMagmad"   
## [506] "fBodyAccMagmax"   
## [507] "fBodyAccMagmin"   
## [508] "fBodyAccMagsma"   
## [509] "fBodyAccMagenergy"   
## [510] "fBodyAccMagiqr"   
## [511] "fBodyAccMagentropy"   
## [512] "fBodyAccMagmaxInds"   
## [513] "fBodyAccMagmeanFreq"   
## [514] "fBodyAccMagskewness"   
## [515] "fBodyAccMagkurtosis"   
## [516] "fBodyBodyAccJerkMagmean"   
## [517] "fBodyBodyAccJerkMagstd"   
## [518] "fBodyBodyAccJerkMagmad"   
## [519] "fBodyBodyAccJerkMagmax"   
## [520] "fBodyBodyAccJerkMagmin"   
## [521] "fBodyBodyAccJerkMagsma"   
## [522] "fBodyBodyAccJerkMagenergy"   
## [523] "fBodyBodyAccJerkMagiqr"   
## [524] "fBodyBodyAccJerkMagentropy"   
## [525] "fBodyBodyAccJerkMagmaxInds"   
## [526] "fBodyBodyAccJerkMagmeanFreq"   
## [527] "fBodyBodyAccJerkMagskewness"   
## [528] "fBodyBodyAccJerkMagkurtosis"   
## [529] "fBodyBodyGyroMagmean"   
## [530] "fBodyBodyGyroMagstd"   
## [531] "fBodyBodyGyroMagmad"   
## [532] "fBodyBodyGyroMagmax"   
## [533] "fBodyBodyGyroMagmin"   
## [534] "fBodyBodyGyroMagsma"   
## [535] "fBodyBodyGyroMagenergy"   
## [536] "fBodyBodyGyroMagiqr"   
## [537] "fBodyBodyGyroMagentropy"   
## [538] "fBodyBodyGyroMagmaxInds"   
## [539] "fBodyBodyGyroMagmeanFreq"   
## [540] "fBodyBodyGyroMagskewness"   
## [541] "fBodyBodyGyroMagkurtosis"   
## [542] "fBodyBodyGyroJerkMagmean"   
## [543] "fBodyBodyGyroJerkMagstd"   
## [544] "fBodyBodyGyroJerkMagmad"   
## [545] "fBodyBodyGyroJerkMagmax"   
## [546] "fBodyBodyGyroJerkMagmin"   
## [547] "fBodyBodyGyroJerkMagsma"   
## [548] "fBodyBodyGyroJerkMagenergy"   
## [549] "fBodyBodyGyroJerkMagiqr"   
## [550] "fBodyBodyGyroJerkMagentropy"   
## [551] "fBodyBodyGyroJerkMagmaxInds"   
## [552] "fBodyBodyGyroJerkMagmeanFreq"   
## [553] "fBodyBodyGyroJerkMagskewness"   
## [554] "fBodyBodyGyroJerkMagkurtosis"   
## [555] "angletBodyAccMean\_gravity"   
## [556] "angletBodyAccJerkMean\_gravityMean"   
## [557] "angletBodyGyroMean\_gravityMean"   
## [558] "angletBodyGyroJerkMean\_gravityMean"  
## [559] "angleX\_gravityMean"   
## [560] "angleY\_gravityMean"   
## [561] "angleZ\_gravityMean"

# Read in the X, y and subject data sets  
# !!!!!!!!!!  
# NOTE: The part below is repeated to process the 'test' and 'train' data.  
# !!!!!!!!!!  
  
# Read in test datasets  
testOrTrain <- "test"  
  
subDir <- paste(dataDir,"/",testOrTrain,sep="")  
  
# Read in data files in test sub-directory  
# First read in subject\_?.txt, the vector of subjectID  
# corresponding to each row of record in X\_?.txt  
filename = paste(subDir,"/subject\_",testOrTrain,".txt",sep="")  
subjectData <- read.table(filename,  
 header = FALSE,  
 sep = " ",  
 col.names = c("subjectid"),  
 colClasses = c("integer"),  
 strip.white = TRUE)  
head(subjectData,n=2)

## subjectid  
## 1 2  
## 2 2

tail(subjectData,n=2)

## subjectid  
## 2946 24  
## 2947 24

# Next read in y\_test.txt, the vector of activites  
# corresponding to each row of record in X\_test.txt  
filename = paste(subDir,"/y\_",testOrTrain,".txt",sep="")  
activityData <- read.table(filename,  
 header = FALSE,  
 sep = " ",  
 col.names = c("activityid"),  
 colClasses = c("factor"),  
 strip.white = TRUE)  
head(activityData,n=2)

## activityid  
## 1 5  
## 2 5

tail(activityData,n=2)

## activityid  
## 2946 2  
## 2947 2

# Added a column in activityTest by looking up the activityNum value in activityMap  
activityData <- mutate(activityData, activity=activityMap[match(activityid, activityMap$activityid, nomatch=0),2])  
head(activityData,n=2)

## activityid activity  
## 1 5 STANDING  
## 2 5 STANDING

tail(activityData,n=2)

## activityid activity  
## 2946 2 WALKING\_UPSTAIRS  
## 2947 2 WALKING\_UPSTAIRS

# Read in the X data set  
filename = paste(subDir,"/X\_",testOrTrain,".txt",sep="")  
xData <- read.table(filename,  
 header = FALSE,  
 col.names = varnames)  
head(xData,n=2)

## tBodyAccmeanX tBodyAccmeanY tBodyAccmeanZ tBodyAccstdX tBodyAccstdY  
## 1 0.2572 -0.02329 -0.01465 -0.9384 -0.9201  
## 2 0.2860 -0.01316 -0.11908 -0.9754 -0.9675  
## tBodyAccstdZ tBodyAccmadX tBodyAccmadY tBodyAccmadZ tBodyAccmaxX  
## 1 -0.6677 -0.9525 -0.9252 -0.6743 -0.8941  
## 2 -0.9450 -0.9868 -0.9684 -0.9458 -0.8941  
## tBodyAccmaxY tBodyAccmaxZ tBodyAccminX tBodyAccminY tBodyAccminZ  
## 1 -0.5546 -0.4662 0.7172 0.6355 0.7895  
## 2 -0.5546 -0.8060 0.7680 0.6837 0.7967  
## tBodyAccsma tBodyAccenergyX tBodyAccenergyY tBodyAccenergyZ tBodyAcciqrX  
## 1 -0.8778 -0.9978 -0.9984 -0.9343 -0.9757  
## 2 -0.9691 -0.9996 -0.9996 -0.9977 -0.9940  
## tBodyAcciqrY tBodyAcciqrZ tBodyAccentropyX tBodyAccentropyY  
## 1 -0.9498 -0.8305 -0.1681 -0.3790  
## 2 -0.9736 -0.9507 -0.3024 -0.3482  
## tBodyAccentropyZ tBodyAccarCoeffX\_1 tBodyAccarCoeffX\_2  
## 1 0.2462 0.5212 -0.4878  
## 2 -0.4048 0.5075 -0.1565  
## tBodyAccarCoeffX\_3 tBodyAccarCoeffX\_4 tBodyAccarCoeffY\_1  
## 1 0.48228 -0.04546 0.2120  
## 2 0.04067 0.27299 0.1976  
## tBodyAccarCoeffY\_2 tBodyAccarCoeffY\_3 tBodyAccarCoeffY\_4  
## 1 -0.1349 0.1309 -0.01418  
## 2 -0.1946 0.4114 -0.34047  
## tBodyAccarCoeffZ\_1 tBodyAccarCoeffZ\_2 tBodyAccarCoeffZ\_3  
## 1 -0.10597 0.07354 -0.1715  
## 2 0.07756 -0.08402 0.0353  
## tBodyAccarCoeffZ\_4 tBodyAcccorrelationX\_Y tBodyAcccorrelationX\_Z  
## 1 0.04006 0.07699 -0.4905  
## 2 -0.01008 -0.10498 -0.4291  
## tBodyAcccorrelationY\_Z tGravityAccmeanX tGravityAccmeanY  
## 1 -0.7090 0.9365 -0.2827  
## 2 0.3992 0.9274 -0.2892  
## tGravityAccmeanZ tGravityAccstdX tGravityAccstdY tGravityAccstdZ  
## 1 0.1153 -0.9254 -0.9370 -0.5643  
## 2 0.1526 -0.9891 -0.9839 -0.9648  
## tGravityAccmadX tGravityAccmadY tGravityAccmadZ tGravityAccmaxX  
## 1 -0.930 -0.9378 -0.6056 0.9061  
## 2 -0.989 -0.9832 -0.9652 0.8562  
## tGravityAccmaxY tGravityAccmaxZ tGravityAccminX tGravityAccminY  
## 1 -0.2792 0.1529 0.9445 -0.2622  
## 2 -0.3049 0.1529 0.9445 -0.2622  
## tGravityAccminZ tGravityAccsma tGravityAccenergyX tGravityAccenergyY  
## 1 -0.07616 -0.01783 0.8293 -0.8646  
## 2 0.14901 0.05768 0.8056 -0.8582  
## tGravityAccenergyZ tGravityAcciqrX tGravityAcciqrY tGravityAcciqrZ  
## 1 -0.9678 -0.9497 -0.9461 -0.7597  
## 2 -0.9572 -0.9884 -0.9817 -0.9712  
## tGravityAccentropyX tGravityAccentropyY tGravityAccentropyZ  
## 1 -0.4250 -1 0.2192  
## 2 -0.7289 -1 -0.4650  
## tGravityAccarCoeffX\_1 tGravityAccarCoeffX\_2 tGravityAccarCoeffX\_3  
## 1 -0.4303 0.4310 -0.4318  
## 2 -0.5099 0.5254 -0.5402  
## tGravityAccarCoeffX\_4 tGravityAccarCoeffY\_1 tGravityAccarCoeffY\_2  
## 1 0.4328 -0.7955 0.7813  
## 2 0.5544 -0.7457 0.7332  
## tGravityAccarCoeffY\_3 tGravityAccarCoeffY\_4 tGravityAccarCoeffZ\_1  
## 1 -0.7804 0.7853 -0.9844  
## 2 -0.7374 0.7487 -0.8452  
## tGravityAccarCoeffZ\_2 tGravityAccarCoeffZ\_3 tGravityAccarCoeffZ\_4  
## 1 0.9872 -0.9894 0.9877  
## 2 0.8693 -0.8931 0.9131  
## tGravityAcccorrelationX\_Y tGravityAcccorrelationX\_Z  
## 1 0.9806 -0.9964  
## 2 0.9452 -0.9114  
## tGravityAcccorrelationY\_Z tBodyAccJerkmeanX tBodyAccJerkmeanY  
## 1 -0.9601 0.07205 0.04575  
## 2 -0.7385 0.07018 -0.01788  
## tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY tBodyAccJerkstdZ  
## 1 -0.106043 -0.9067 -0.9380 -0.9359  
## 2 -0.001721 -0.9492 -0.9727 -0.9777  
## tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ tBodyAccJerkmaxX  
## 1 -0.9161 -0.9367 -0.9491 -0.9032  
## 2 -0.9693 -0.9737 -0.9786 -0.9151  
## tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX tBodyAccJerkminY  
## 1 -0.9498 -0.8914 0.8985 0.9502  
## 2 -0.9812 -0.9777 0.8985 0.9677  
## tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX tBodyAccJerkenergyY  
## 1 0.9462 -0.9307 -0.9950 -0.9975  
## 2 0.9661 -0.9743 -0.9984 -0.9994  
## tBodyAccJerkenergyZ tBodyAccJerkiqrX tBodyAccJerkiqrY tBodyAccJerkiqrZ  
## 1 -0.9970 -0.9364 -0.9469 -0.9688  
## 2 -0.9994 -0.9797 -0.9791 -0.9853  
## tBodyAccJerkentropyX tBodyAccJerkentropyY tBodyAccJerkentropyZ  
## 1 -0.08517 -0.3103 -0.5103  
## 2 -0.49723 -0.6558 -0.6144  
## tBodyAccJerkarCoeffX\_1 tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3  
## 1 0.5215 -0.2259 0.4917  
## 2 0.3980 0.2997 0.2392  
## tBodyAccJerkarCoeffX\_4 tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2  
## 1 0.3128 0.2298 0.1140  
## 2 0.3664 0.2122 -0.1836  
## tBodyAccJerkarCoeffY\_3 tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1  
## 1 0.2199 0.4230 -0.082633  
## 2 0.5084 0.2321 -0.002832  
## tBodyAccJerkarCoeffZ\_2 tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 1 0.1404 -0.19623 0.07236  
## 2 -0.0381 -0.08266 0.10156  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 1 -0.2649 0.03585  
## 2 -0.1532 -0.27997  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY tBodyGyromeanZ  
## 1 -0.3497 0.119976 -0.09179 0.1896  
## 2 0.4976 -0.001552 -0.18729 0.1807  
## tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ tBodyGyromadX tBodyGyromadY  
## 1 -0.8831 -0.8162 -0.9409 -0.8886 -0.8578  
## 2 -0.9256 -0.9296 -0.9676 -0.9179 -0.9500  
## tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY tBodyGyromaxZ tBodyGyrominX  
## 1 -0.9458 -0.6634 -0.7134 -0.6487 0.8371  
## 2 -0.9670 -0.8103 -0.8699 -0.7032 0.8230  
## tBodyGyrominY tBodyGyrominZ tBodyGyrosma tBodyGyroenergyX  
## 1 0.8253 0.811 -0.7965 -0.9796  
## 2 0.8708 0.844 -0.8888 -0.9969  
## tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX tBodyGyroiqrY  
## 1 -0.9829 -0.9940 -0.8866 -0.9061  
## 2 -0.9952 -0.9959 -0.9113 -0.9607  
## tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY tBodyGyroentropyZ  
## 1 -0.9580 0.77403 -0.2677 0.4522  
## 2 -0.9693 -0.01836 -0.8516 0.3050  
## tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2 tBodyGyroarCoeffX\_3  
## 1 -0.07845 -0.01258 0.236  
## 2 -0.24703 0.30891 -0.482  
## tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1 tBodyGyroarCoeffY\_2  
## 1 -0.1990 0.03392 -0.08078  
## 2 0.5087 -0.25024 0.19069  
## tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4 tBodyGyroarCoeffZ\_1  
## 1 0.006999 0.2449 0.2165  
## 2 -0.136273 0.1995 -0.0119  
## tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3 tBodyGyroarCoeffZ\_4  
## 1 -0.2797 0.2497 0.01772  
## 2 -0.1385 0.3354 -0.27653  
## tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z tBodyGyrocorrelationY\_Z  
## 1 0.648465 -0.2369 -0.3017  
## 2 -0.002973 0.5418 -0.5340  
## tBodyGyroJerkmeanX tBodyGyroJerkmeanY tBodyGyroJerkmeanZ  
## 1 -0.2049 -0.1745 -0.09339  
## 2 -0.1387 -0.0258 -0.07142  
## tBodyGyroJerkstdX tBodyGyroJerkstdY tBodyGyroJerkstdZ tBodyGyroJerkmadX  
## 1 -0.9012 -0.9109 -0.9393 -0.9104  
## 2 -0.9623 -0.9563 -0.9813 -0.9686  
## tBodyGyroJerkmadY tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 1 -0.9274 -0.9536 -0.8679 -0.9135  
## 2 -0.9740 -0.9822 -0.9593 -0.9511  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY tBodyGyroJerkminZ  
## 1 -0.8976 0.9049 0.9173 0.9476  
## 2 -0.9796 0.9497 0.9298 0.9771  
## tBodyGyroJerksma tBodyGyroJerkenergyX tBodyGyroJerkenergyY  
## 1 -0.9296 -0.9947 -0.9958  
## 2 -0.9751 -0.9991 -0.9989  
## tBodyGyroJerkenergyZ tBodyGyroJerkiqrX tBodyGyroJerkiqrY  
## 1 -0.9978 -0.9365 -0.9589  
## 2 -0.9997 -0.9755 -0.9873  
## tBodyGyroJerkiqrZ tBodyGyroJerkentropyX tBodyGyroJerkentropyY  
## 1 -0.9703 0.03662 0.07646  
## 2 -0.9825 -0.29249 -0.14391  
## tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1 tBodyGyroJerkarCoeffX\_2  
## 1 -0.1971 0.10651 -0.02081  
## 2 -0.3861 -0.05297 0.20970  
## tBodyGyroJerkarCoeffX\_3 tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 1 0.1933 0.3045 0.1157  
## 2 -0.1117 -0.2575 -0.1971  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3 tBodyGyroJerkarCoeffY\_4  
## 1 0.05415 0.06895 0.1970  
## 2 0.25113 -0.04836 0.1582  
## tBodyGyroJerkarCoeffZ\_1 tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 1 0.3099 -0.2127 0.1732  
## 2 0.1589 -0.2311 0.3157  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 1 0.1458 0.1240  
## 2 0.1434 0.2849  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z tBodyAccMagmean  
## 1 -0.1553 -0.3234 -0.8669  
## 2 -0.1712 -0.2481 -0.9690  
## tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax tBodyAccMagmin  
## 1 -0.7052 -0.7440 -0.7608 -0.9816  
## 2 -0.9539 -0.9632 -0.9376 -0.9859  
## tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr tBodyAccMagentropy  
## 1 -0.8669 -0.9802 -0.8595 0.2551  
## 2 -0.9690 -0.9989 -0.9762 -0.3293  
## tBodyAccMagarCoeff1 tBodyAccMagarCoeff2 tBodyAccMagarCoeff3  
## 1 0.05378 -0.2041 0.6105  
## 2 0.45849 -0.4565 0.4881  
## tBodyAccMagarCoeff4 tGravityAccMagmean tGravityAccMagstd  
## 1 -0.5644 -0.8669 -0.7052  
## 2 -0.3483 -0.9690 -0.9539  
## tGravityAccMagmad tGravityAccMagmax tGravityAccMagmin tGravityAccMagsma  
## 1 -0.7440 -0.7608 -0.9816 -0.8669  
## 2 -0.9632 -0.9376 -0.9859 -0.9690  
## tGravityAccMagenergy tGravityAccMagiqr tGravityAccMagentropy  
## 1 -0.9802 -0.8595 0.2551  
## 2 -0.9989 -0.9762 -0.3293  
## tGravityAccMagarCoeff1 tGravityAccMagarCoeff2 tGravityAccMagarCoeff3  
## 1 0.05378 -0.2041 0.6105  
## 2 0.45849 -0.4565 0.4881  
## tGravityAccMagarCoeff4 tBodyAccJerkMagmean tBodyAccJerkMagstd  
## 1 -0.5644 -0.9298 -0.896  
## 2 -0.3483 -0.9737 -0.941  
## tBodyAccJerkMagmad tBodyAccJerkMagmax tBodyAccJerkMagmin  
## 1 -0.9004 -0.9030 -0.975  
## 2 -0.9597 -0.9288 -0.975  
## tBodyAccJerkMagsma tBodyAccJerkMagenergy tBodyAccJerkMagiqr  
## 1 -0.9298 -0.9956 -0.9141  
## 2 -0.9737 -0.9988 -0.9781  
## tBodyAccJerkMagentropy tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 1 -0.1296 0.2389 -0.3456  
## 2 -0.5277 -0.3186 0.1842  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 1 0.3265 -0.2630 -0.7955  
## 2 -0.4601 0.7134 -0.8984  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 1 -0.7621 -0.7827 -0.7166 -0.7642  
## 2 -0.9109 -0.9011 -0.9024 -0.8938  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr tBodyGyroMagentropy  
## 1 -0.7955 -0.9742 -0.8396 0.6676  
## 2 -0.8984 -0.9942 -0.9102 0.3946  
## tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2 tBodyGyroMagarCoeff3  
## 1 0.03562 -0.16189 0.15325  
## 2 0.03013 -0.03752 0.08112  
## tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean tBodyGyroJerkMagstd  
## 1 -0.00676 -0.9252 -0.8943  
## 2 -0.22204 -0.9734 -0.9441  
## tBodyGyroJerkMagmad tBodyGyroJerkMagmax tBodyGyroJerkMagmin  
## 1 -0.9001 -0.9167 -0.9764  
## 2 -0.9606 -0.9293 -0.9764  
## tBodyGyroJerkMagsma tBodyGyroJerkMagenergy tBodyGyroJerkMagiqr  
## 1 -0.9252 -0.9958 -0.9118  
## 2 -0.9734 -0.9991 -0.9844  
## tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 1 0.3317 0.51695  
## 2 -0.1862 0.03224  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 1 -0.51350 0.04132  
## 2 0.01025 -0.65002  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 1 0.01184 -0.9185 -0.9182 -0.7891  
## 2 0.52649 -0.9609 -0.9644 -0.9567  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 1 -0.9483 -0.9251 -0.6363 -0.9307 -0.9244  
## 2 -0.9843 -0.9702 -0.9419 -0.9758 -0.9703  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 1 -0.7249 -0.9684 -0.9401 -0.5972 -0.9661  
## 2 -0.9442 -0.9931 -0.9744 -0.9427 -0.9724  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 1 -0.9845 -0.9521 -0.8651 -0.9978 -0.9960  
## 2 -0.9856 -0.9995 -0.9576 -0.9996 -0.9991  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ fBodyAccentropyX  
## 1 -0.9402 -0.9048 -0.9338 -0.8694 -0.3397  
## 2 -0.9976 -0.9550 -0.9710 -0.9662 -0.6040  
## fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX fBodyAccmaxIndsY  
## 1 -0.4858 -0.1663 -1.0000 -1  
## 2 -0.7869 -0.6103 -0.8065 -1  
## fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY fBodyAccmeanFreqZ  
## 1 -1 0.01112 0.1213 -0.5229  
## 2 -1 0.35207 0.1745 -0.3207  
## fBodyAccskewnessX fBodyAcckurtosisX fBodyAccskewnessY fBodyAcckurtosisY  
## 1 -0.5720 -0.8946 -0.3383 -0.6868  
## 2 -0.9182 -0.9988 -0.3264 -0.6571  
## fBodyAccskewnessZ fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8  
## 1 0.1896 -0.1136 -0.9985  
## 2 -0.3277 -0.6274 -0.9999  
## fBodyAccbandsEnergy9\_16 fBodyAccbandsEnergy17\_24  
## 1 -0.9979 -0.9956  
## 2 -0.9996 -0.9987  
## fBodyAccbandsEnergy25\_32 fBodyAccbandsEnergy33\_40  
## 1 -0.9950 -0.9960  
## 2 -0.9979 -0.9962  
## fBodyAccbandsEnergy41\_48 fBodyAccbandsEnergy49\_56  
## 1 -0.9915 -0.9921  
## 2 -0.9977 -0.9992  
## fBodyAccbandsEnergy57\_64 fBodyAccbandsEnergy1\_16  
## 1 -0.9998 -0.9982  
## 2 -0.9999 -0.9998  
## fBodyAccbandsEnergy17\_32 fBodyAccbandsEnergy33\_48  
## 1 -0.9947 -0.9943  
## 2 -0.9983 -0.9968  
## fBodyAccbandsEnergy49\_64 fBodyAccbandsEnergy1\_24  
## 1 -0.9947 -0.9980  
## 2 -0.9995 -0.9997  
## fBodyAccbandsEnergy25\_48 fBodyAccbandsEnergy1\_8.1  
## 1 -0.9937 -0.9962  
## 2 -0.9969 -0.9991  
## fBodyAccbandsEnergy9\_16.1 fBodyAccbandsEnergy17\_24.1  
## 1 -0.9980 -0.9989  
## 2 -0.9997 -0.9996  
## fBodyAccbandsEnergy25\_32.1 fBodyAccbandsEnergy33\_40.1  
## 1 -0.9964 -0.9976  
## 2 -0.9986 -0.9998  
## fBodyAccbandsEnergy41\_48.1 fBodyAccbandsEnergy49\_56.1  
## 1 -0.9951 -0.9974  
## 2 -0.9996 -0.9991  
## fBodyAccbandsEnergy57\_64.1 fBodyAccbandsEnergy1\_16.1  
## 1 -0.9982 -0.9961  
## 2 -0.9994 -0.9992  
## fBodyAccbandsEnergy17\_32.1 fBodyAccbandsEnergy33\_48.1  
## 1 -0.9979 -0.9964  
## 2 -0.9992 -0.9997  
## fBodyAccbandsEnergy49\_64.1 fBodyAccbandsEnergy1\_24.1  
## 1 -0.9976 -0.9962  
## 2 -0.9992 -0.9992  
## fBodyAccbandsEnergy25\_48.1 fBodyAccbandsEnergy1\_8.2  
## 1 -0.9962 -0.9247  
## 2 -0.9989 -0.9972  
## fBodyAccbandsEnergy9\_16.2 fBodyAccbandsEnergy17\_24.2  
## 1 -0.9941 -0.9953  
## 2 -0.9993 -0.9997  
## fBodyAccbandsEnergy25\_32.2 fBodyAccbandsEnergy33\_40.2  
## 1 -0.9990 -0.9979  
## 2 -0.9997 -0.9994  
## fBodyAccbandsEnergy41\_48.2 fBodyAccbandsEnergy49\_56.2  
## 1 -0.9949 -0.9893  
## 2 -0.9993 -0.9991  
## fBodyAccbandsEnergy57\_64.2 fBodyAccbandsEnergy1\_16.2  
## 1 -0.9801 -0.9379  
## 2 -1.0000 -0.9975  
## fBodyAccbandsEnergy17\_32.2 fBodyAccbandsEnergy33\_48.2  
## 1 -0.9967 -0.9970  
## 2 -0.9997 -0.9994  
## fBodyAccbandsEnergy49\_64.2 fBodyAccbandsEnergy1\_24.2  
## 1 -0.9864 -0.9392  
## 2 -0.9994 -0.9976  
## fBodyAccbandsEnergy25\_48.2 fBodyAccJerkmeanX fBodyAccJerkmeanY  
## 1 -0.9984 -0.8996 -0.9375  
## 2 -0.9997 -0.9435 -0.9692  
## fBodyAccJerkmeanZ fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ  
## 1 -0.9236 -0.9244 -0.9432 -0.9479  
## 2 -0.9734 -0.9616 -0.9800 -0.9808  
## fBodyAccJerkmadX fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX  
## 1 -0.8966 -0.9383 -0.9426 -0.9486  
## 2 -0.9458 -0.9773 -0.9772 -0.9774  
## fBodyAccJerkmaxY fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY  
## 1 -0.9583 -0.9588 -0.9439 -0.9873  
## 2 -0.9871 -0.9842 -0.9786 -0.9535  
## fBodyAccJerkminZ fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 1 -0.9785 -0.9053 -0.9950 -0.9975  
## 2 -0.9967 -0.9555 -0.9984 -0.9994  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY fBodyAccJerkiqrZ  
## 1 -0.9970 -0.8871 -0.9358 -0.9537  
## 2 -0.9994 -0.9296 -0.9732 -0.9731  
## fBodyAccJerkentropyX fBodyAccJerkentropyY fBodyAccJerkentropyZ  
## 1 -0.4707 -0.6722 -0.5963  
## 2 -0.6066 -1.0000 -0.9422  
## fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY fBodyAccJerkmaxIndsZ  
## 1 -0.52 0.08 0.32  
## 2 -0.16 -0.32 -0.40  
## fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY fBodyAccJerkmeanFreqZ  
## 1 0.4510 0.1372 -0.1803  
## 2 0.4729 0.1672 -0.2431  
## fBodyAccJerkskewnessX fBodyAccJerkkurtosisX fBodyAccJerkskewnessY  
## 1 -0.5801 -0.9081 -0.6255  
## 2 -0.9256 -0.9659 -0.7208  
## fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ fBodyAccJerkkurtosisZ  
## 1 -0.9428 -0.6619 -0.9115  
## 2 -0.9924 -0.7647 -0.9448  
## fBodyAccJerkbandsEnergy1\_8 fBodyAccJerkbandsEnergy9\_16  
## 1 -0.9990 -0.9976  
## 2 -0.9999 -0.9995  
## fBodyAccJerkbandsEnergy17\_24 fBodyAccJerkbandsEnergy25\_32  
## 1 -0.9960 -0.9947  
## 2 -0.9986 -0.9977  
## fBodyAccJerkbandsEnergy33\_40 fBodyAccJerkbandsEnergy41\_48  
## 1 -0.9956 -0.9879  
## 2 -0.9959 -0.9968  
## fBodyAccJerkbandsEnergy49\_56 fBodyAccJerkbandsEnergy57\_64  
## 1 -0.9864 -0.9982  
## 2 -0.9988 -0.9999  
## fBodyAccJerkbandsEnergy1\_16 fBodyAccJerkbandsEnergy17\_32  
## 1 -0.9980 -0.9945  
## 2 -0.9996 -0.9979  
## fBodyAccJerkbandsEnergy33\_48 fBodyAccJerkbandsEnergy49\_64  
## 1 -0.9920 -0.9863  
## 2 -0.9959 -0.9988  
## fBodyAccJerkbandsEnergy1\_24 fBodyAccJerkbandsEnergy25\_48  
## 1 -0.9969 -0.9908  
## 2 -0.9992 -0.9956  
## fBodyAccJerkbandsEnergy1\_8.1 fBodyAccJerkbandsEnergy9\_16.1  
## 1 -0.9994 -0.9986  
## 2 -0.9994 -0.9998  
## fBodyAccJerkbandsEnergy17\_24.1 fBodyAccJerkbandsEnergy25\_32.1  
## 1 -0.9987 -0.9964  
## 2 -0.9996 -0.9992  
## fBodyAccJerkbandsEnergy33\_40.1 fBodyAccJerkbandsEnergy41\_48.1  
## 1 -0.9972 -0.9945  
## 2 -0.9995 -0.9990  
## fBodyAccJerkbandsEnergy49\_56.1 fBodyAccJerkbandsEnergy57\_64.1  
## 1 -0.9979 -1.000  
## 2 -0.9985 -0.999  
## fBodyAccJerkbandsEnergy1\_16.1 fBodyAccJerkbandsEnergy17\_32.1  
## 1 -0.9986 -0.9974  
## 2 -0.9996 -0.9993  
## fBodyAccJerkbandsEnergy33\_48.1 fBodyAccJerkbandsEnergy49\_64.1  
## 1 -0.9954 -0.9982  
## 2 -0.9992 -0.9985  
## fBodyAccJerkbandsEnergy1\_24.1 fBodyAccJerkbandsEnergy25\_48.1  
## 1 -0.9985 -0.9960  
## 2 -0.9995 -0.9992  
## fBodyAccJerkbandsEnergy1\_8.2 fBodyAccJerkbandsEnergy9\_16.2  
## 1 -0.9936 -0.9978  
## 2 -0.9982 -0.9991  
## fBodyAccJerkbandsEnergy17\_24.2 fBodyAccJerkbandsEnergy25\_32.2  
## 1 -0.9971 -0.9987  
## 2 -0.9997 -0.9997  
## fBodyAccJerkbandsEnergy33\_40.2 fBodyAccJerkbandsEnergy41\_48.2  
## 1 -0.9967 -0.9951  
## 2 -0.9994 -0.9993  
## fBodyAccJerkbandsEnergy49\_56.2 fBodyAccJerkbandsEnergy57\_64.2  
## 1 -0.9985 -0.9991  
## 2 -0.9985 -1.0000  
## fBodyAccJerkbandsEnergy1\_16.2 fBodyAccJerkbandsEnergy17\_32.2  
## 1 -0.9959 -0.9980  
## 2 -0.9987 -0.9997  
## fBodyAccJerkbandsEnergy33\_48.2 fBodyAccJerkbandsEnergy49\_64.2  
## 1 -0.9960 -0.9985  
## 2 -0.9994 -0.9986  
## fBodyAccJerkbandsEnergy1\_24.2 fBodyAccJerkbandsEnergy25\_48.2  
## 1 -0.9963 -0.9977  
## 2 -0.9992 -0.9996  
## fBodyGyromeanX fBodyGyromeanY fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY  
## 1 -0.8236 -0.8079 -0.9179 -0.9033 -0.8227  
## 2 -0.9225 -0.9265 -0.9682 -0.9271 -0.9320  
## fBodyGyrostdZ fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX  
## 1 -0.9562 -0.8651 -0.8318 -0.9411 -0.9048  
## 2 -0.9701 -0.9400 -0.9339 -0.9671 -0.9035  
## fBodyGyromaxY fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ  
## 1 -0.8793 -0.9678 -0.8786 -0.9483 -0.9197  
## 2 -0.9488 -0.9777 -0.9890 -0.9611 -0.9752  
## fBodyGyrosma fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ  
## 1 -0.8285 -0.9929 -0.9827 -0.9980  
## 2 -0.9313 -0.9971 -0.9973 -0.9993  
## fBodyGyroiqrX fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX  
## 1 -0.8789 -0.8382 -0.9291 0.0007581  
## 2 -0.9477 -0.9411 -0.9788 -0.2382949  
## fBodyGyroentropyY fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 1 0.20014 -0.2534 -1 -0.9355  
## 2 -0.09075 -0.5945 -1 -0.9355  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 1 -0.931 0.18403 -0.05932  
## 2 -0.931 0.01811 -0.22727  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 1 0.4381 -0.3954 -0.6988  
## 2 -0.1517 0.5575 0.3803  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 1 -0.3875 -0.7864 -0.4857  
## 2 -0.3965 -0.7591 -0.1502  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 1 -0.7868 -0.9946 -0.9905  
## 2 -0.5484 -0.9971 -0.9993  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 1 -0.9928 -0.9957  
## 2 -0.9991 -0.9972  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 1 -0.9871 -0.9867  
## 2 -0.9986 -0.9982  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 1 -0.9841 -0.9853  
## 2 -0.9982 -0.9976  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 1 -0.9936 -0.9924  
## 2 -0.9972 -0.9981  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 1 -0.9856 -0.9846  
## 2 -0.9983 -0.9979  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 1 -0.9933 -0.9927  
## 2 -0.9972 -0.9975  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 1 -0.9779 -0.9949  
## 2 -0.9968 -0.9989  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 1 -0.9978 -0.9948  
## 2 -0.9996 -0.9995  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 1 -0.9924 -0.9881  
## 2 -0.9993 -0.9992  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 1 -0.9904 -0.9880  
## 2 -0.9992 -0.9997  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 1 -0.9818 -0.9964  
## 2 -0.9972 -0.9994  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 1 -0.9915 -0.9881  
## 2 -0.9993 -0.9993  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 1 -0.9820 -0.9934  
## 2 -0.9972 -0.9994  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 1 -0.9989 -0.9984  
## 2 -0.9994 -0.9998  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 1 -0.9985 -0.9984  
## 2 -0.9999 -0.9999  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 1 -0.9989 -0.9959  
## 2 -0.9999 -0.9998  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 1 -0.9931 -0.9955  
## 2 -0.9992 -0.9997  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 1 -0.9984 -0.9978  
## 2 -0.9994 -0.9998  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 1 -0.9981 -0.9941  
## 2 -0.9999 -0.9994  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2 fBodyAccMagmean  
## 1 -0.9982 -0.9983 -0.7909  
## 2 -0.9993 -0.9999 -0.9541  
## fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax fBodyAccMagmin  
## 1 -0.7111 -0.7267 -0.7777 -0.9449  
## 2 -0.9597 -0.9607 -0.9687 -0.9569  
## fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr fBodyAccMagentropy  
## 1 -0.7909 -0.9540 -0.8735 -0.1746  
## 2 -0.9541 -0.9985 -0.9830 -0.7521  
## fBodyAccMagmaxInds fBodyAccMagmeanFreq fBodyAccMagskewness  
## 1 -1.0000 -0.4835 0.01104  
## 2 -0.8621 0.2035 -0.20659  
## fBodyAccMagkurtosis fBodyBodyAccJerkMagmean fBodyBodyAccJerkMagstd  
## 1 -0.3845 -0.8951 -0.8964  
## 2 -0.5994 -0.9454 -0.9342  
## fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax fBodyBodyAccJerkMagmin  
## 1 -0.8882 -0.9285 -0.8981  
## 2 -0.9293 -0.9500 -0.9677  
## fBodyBodyAccJerkMagsma fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 1 -0.8951 -0.9935 -0.9215  
## 2 -0.9454 -0.9976 -0.9572  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 1 -0.4846 -1  
## 2 -0.7236 -1  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 1 -0.03536 -0.2542  
## 2 -0.49121 -0.2154  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 1 -0.7003 -0.7706 -0.7971  
## 2 -0.6660 -0.9245 -0.9168  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 1 -0.7645 -0.8202 -0.9380  
## 2 -0.9194 -0.9180 -0.9911  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 1 -0.7706 -0.9710 -0.7984  
## 2 -0.9245 -0.9957 -0.9331  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds fBodyBodyGyroMagmeanFreq  
## 1 0.1794 -1 -0.04739  
## 2 -0.2189 -1 -0.03147  
## fBodyBodyGyroMagskewness fBodyBodyGyroMagkurtosis  
## 1 -0.46785 -0.7613  
## 2 -0.09065 -0.4618  
## fBodyBodyGyroJerkMagmean fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 1 -0.8902 -0.9073 -0.8953  
## 2 -0.9520 -0.9382 -0.9380  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin fBodyBodyGyroJerkMagsma  
## 1 -0.9179 -0.9098 -0.8902  
## 2 -0.9499 -0.9869 -0.9520  
## fBodyBodyGyroJerkMagenergy fBodyBodyGyroJerkMagiqr  
## 1 -0.9941 -0.8980  
## 2 -0.9983 -0.9513  
## fBodyBodyGyroJerkMagentropy fBodyBodyGyroJerkMagmaxInds  
## 1 -0.2348 -1  
## 2 -0.4311 -1  
## fBodyBodyGyroJerkMagmeanFreq fBodyBodyGyroJerkMagskewness  
## 1 0.07165 -0.3304  
## 2 -0.40119 -0.1218  
## fBodyBodyGyroJerkMagkurtosis angletBodyAccMean\_gravity  
## 1 -0.7060 0.006462  
## 2 -0.5949 -0.083495  
## angletBodyAccJerkMean\_gravityMean angletBodyGyroMean\_gravityMean  
## 1 0.1629 -0.8259  
## 2 0.0175 -0.4344  
## angletBodyGyroJerkMean\_gravityMean angleX\_gravityMean angleY\_gravityMean  
## 1 0.2712 -0.7200 0.2768  
## 2 0.9206 -0.6981 0.2813  
## angleZ\_gravityMean  
## 1 -0.05798  
## 2 -0.08390

tail(xData,n=2)

## tBodyAccmeanX tBodyAccmeanY tBodyAccmeanZ tBodyAccstdX tBodyAccstdY  
## 2946 0.2376 0.01847 -0.0965 -0.3231 -0.2298  
## 2947 0.1536 -0.01844 -0.1370 -0.3300 -0.1953  
## tBodyAccstdZ tBodyAccmadX tBodyAccmadY tBodyAccmadZ tBodyAccmaxX  
## 2946 -0.2076 -0.3924 -0.2796 -0.2895 0.007471  
## 2947 -0.1643 -0.4310 -0.2183 -0.2299 -0.111527  
## tBodyAccmaxY tBodyAccmaxZ tBodyAccminX tBodyAccminY tBodyAccminZ  
## 2946 -0.1061 -0.1727 0.3575 0.2756 0.2467  
## 2947 -0.0785 -0.1634 0.2419 0.1682 0.2138  
## tBodyAccsma tBodyAccenergyX tBodyAccenergyY tBodyAccenergyZ  
## 2946 -0.2514 -0.7693 -0.8823 -0.7160  
## 2947 -0.2362 -0.7712 -0.8741 -0.6838  
## tBodyAcciqrX tBodyAcciqrY tBodyAcciqrZ tBodyAccentropyX  
## 2946 -0.5616 -0.5460 -0.5513 0.19492  
## 2947 -0.6163 -0.4089 -0.4272 0.02881  
## tBodyAccentropyY tBodyAccentropyZ tBodyAccarCoeffX\_1  
## 2946 0.3840 0.3526 -0.1001  
## 2947 0.2134 0.2608 -0.2607  
## tBodyAccarCoeffX\_2 tBodyAccarCoeffX\_3 tBodyAccarCoeffX\_4  
## 2946 -0.21894 0.5418 -0.2047  
## 2947 -0.05293 0.4066 -0.1511  
## tBodyAccarCoeffY\_1 tBodyAccarCoeffY\_2 tBodyAccarCoeffY\_3  
## 2946 -0.1334 -0.03232 0.2336  
## 2947 -0.2428 0.02142 0.3380  
## tBodyAccarCoeffY\_4 tBodyAccarCoeffZ\_1 tBodyAccarCoeffZ\_2  
## 2946 0.04723 -0.2084 0.1956  
## 2947 -0.12304 -0.3319 0.2982  
## tBodyAccarCoeffZ\_3 tBodyAccarCoeffZ\_4 tBodyAcccorrelationX\_Y  
## 2946 -0.054894 -0.03883 -0.1908  
## 2947 -0.001256 -0.17922 -0.0803  
## tBodyAcccorrelationX\_Z tBodyAcccorrelationY\_Z tGravityAccmeanX  
## 2946 -0.5071 0.12264 0.8927  
## 2947 -0.5229 0.05625 0.8943  
## tGravityAccmeanY tGravityAccmeanZ tGravityAccstdX tGravityAccstdY  
## 2946 -0.2624 -0.2351 -0.9860 -0.9622  
## 2947 -0.2614 -0.2361 -0.9847 -0.9646  
## tGravityAccstdZ tGravityAccmadX tGravityAccmadY tGravityAccmadZ  
## 2946 -0.9490 -0.9864 -0.9634 -0.9497  
## 2947 -0.9624 -0.9851 -0.9652 -0.9638  
## tGravityAccmaxX tGravityAccmaxY tGravityAccmaxZ tGravityAccminX  
## 2946 0.8237 -0.2728 -0.2315 0.909  
## 2947 0.8254 -0.2728 -0.2338 0.909  
## tGravityAccminY tGravityAccminZ tGravityAccsma tGravityAccenergyX  
## 2946 -0.2447 -0.2452 0.1687 0.7174  
## 2947 -0.2428 -0.2451 0.1718 0.7214  
## tGravityAccenergyY tGravityAccenergyZ tGravityAcciqrX tGravityAcciqrY  
## 2946 -0.8848 -0.8853 -0.9870 -0.9655  
## 2947 -0.8857 -0.8844 -0.9861 -0.9660  
## tGravityAcciqrZ tGravityAccentropyX tGravityAccentropyY  
## 2946 -0.9469 -0.6031 -1  
## 2947 -0.9687 -0.5495 -1  
## tGravityAccentropyZ tGravityAccarCoeffX\_1 tGravityAccarCoeffX\_2  
## 2946 -1 -0.3885 0.4296  
## 2947 -1 -0.4299 0.4742  
## tGravityAccarCoeffX\_3 tGravityAccarCoeffX\_4 tGravityAccarCoeffY\_1  
## 2946 -0.4667 0.4997 -0.6415  
## 2947 -0.5148 0.5515 -0.5619  
## tGravityAccarCoeffY\_2 tGravityAccarCoeffY\_3 tGravityAccarCoeffY\_4  
## 2946 0.6441 -0.6710 0.7068  
## 2947 0.5565 -0.5798 0.6141  
## tGravityAccarCoeffZ\_1 tGravityAccarCoeffZ\_2 tGravityAccarCoeffZ\_3  
## 2946 -0.4110 0.4388 -0.4654  
## 2947 -0.3194 0.3508 -0.3812  
## tGravityAccarCoeffZ\_4 tGravityAcccorrelationX\_Y  
## 2946 0.4881 0.2393  
## 2947 0.4081 0.1287  
## tGravityAcccorrelationX\_Z tGravityAcccorrelationY\_Z tBodyAccJerkmeanX  
## 2946 -0.1463 -0.8849 0.3346  
## 2947 -0.1541 -0.7441 0.2238  
## tBodyAccJerkmeanY tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY  
## 2946 -0.05912 0.02002 -0.4418 -0.5789  
## 2947 0.25669 0.01282 -0.4791 -0.5688  
## tBodyAccJerkstdZ tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ  
## 2946 -0.4904 -0.4490 -0.5486 -0.5218  
## 2947 -0.4171 -0.4717 -0.5223 -0.4654  
## tBodyAccJerkmaxX tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX  
## 2946 -0.5875 -0.7783 -0.5697 0.2751  
## 2947 -0.6606 -0.7302 -0.5673 0.2873  
## tBodyAccJerkminY tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX  
## 2946 0.6178 0.1615 -0.4686 -0.8415  
## 2947 0.7369 0.1615 -0.4512 -0.8619  
## tBodyAccJerkenergyY tBodyAccJerkenergyZ tBodyAccJerkiqrX  
## 2946 -0.9081 -0.8645 -0.3799  
## 2947 -0.9036 -0.8240 -0.4182  
## tBodyAccJerkiqrY tBodyAccJerkiqrZ tBodyAccJerkentropyX  
## 2946 -0.6026 -0.5744 0.6879  
## 2947 -0.5645 -0.5956 0.5859  
## tBodyAccJerkentropyY tBodyAccJerkentropyZ tBodyAccJerkarCoeffX\_1  
## 2946 0.4460 0.4231 -0.03726  
## 2947 0.5268 0.5353 -0.19676  
## tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3 tBodyAccJerkarCoeffX\_4  
## 2946 -0.3783 0.29352 0.1287  
## 2947 -0.2123 0.03821 0.3484  
## tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2 tBodyAccJerkarCoeffY\_3  
## 2946 -0.1995 -0.2004 0.15774  
## 2947 -0.2760 -0.1472 0.03006  
## tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1 tBodyAccJerkarCoeffZ\_2  
## 2946 0.06169 -0.2793 0.1252  
## 2947 0.44351 -0.3842 0.1677  
## tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 2946 -0.06500 0.005851  
## 2947 0.03805 -0.022593  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 2946 -0.27763 -0.5978  
## 2947 -0.06815 -0.4918  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY  
## 2946 0.35217 -0.3359 0.09935  
## 2947 0.05515 -0.2082 -0.03865  
## tBodyGyromeanZ tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ  
## 2946 0.3551 -0.6679 -0.5552 -0.3426  
## 2947 0.2461 -0.6167 -0.5086 -0.3139  
## tBodyGyromadX tBodyGyromadY tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY  
## 2946 -0.6867 -0.5805 -0.3606 -0.7633 -0.6370  
## 2947 -0.6119 -0.5445 -0.3233 -0.6659 -0.5998  
## tBodyGyromaxZ tBodyGyrominX tBodyGyrominY tBodyGyrominZ tBodyGyrosma  
## 2946 -0.3149 0.4489 0.5666 0.3642 -0.3483  
## 2947 -0.2646 0.4306 0.5666 0.3205 -0.3741  
## tBodyGyroenergyX tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX  
## 2946 -0.8885 -0.8966 -0.7714 -0.7170  
## 2947 -0.9118 -0.8801 -0.7716 -0.6006  
## tBodyGyroiqrY tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY  
## 2946 -0.5978 -0.4789 -0.5233 0.4323  
## 2947 -0.5855 -0.4323 -0.2483 0.1601  
## tBodyGyroentropyZ tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2  
## 2946 0.6511 -0.2690 0.1511  
## 2947 0.4692 -0.3018 0.1676  
## tBodyGyroarCoeffX\_3 tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1  
## 2946 0.1042 -0.0798 -0.5730  
## 2947 0.2319 -0.3069 -0.3957  
## tBodyGyroarCoeffY\_2 tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4  
## 2946 0.6144 -0.4970 0.3280  
## 2947 0.4022 -0.1729 0.1857  
## tBodyGyroarCoeffZ\_1 tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3  
## 2946 -0.4215 0.3659 -0.31675  
## 2947 -0.5027 0.3416 -0.07051  
## tBodyGyroarCoeffZ\_4 tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z  
## 2946 0.30467 0.00741 0.2874  
## 2947 0.04242 -0.04779 0.3971  
## tBodyGyrocorrelationY\_Z tBodyGyroJerkmeanX tBodyGyroJerkmeanY  
## 2946 0.1853 -0.05582 -0.1037  
## 2947 0.1237 -0.02815 0.1737  
## tBodyGyroJerkmeanZ tBodyGyroJerkstdX tBodyGyroJerkstdY  
## 2946 0.314819 -0.7150 -0.6623  
## 2947 0.001373 -0.6858 -0.6194  
## tBodyGyroJerkstdZ tBodyGyroJerkmadX tBodyGyroJerkmadY  
## 2946 -0.7009 -0.7170 -0.6967  
## 2947 -0.6873 -0.6941 -0.6633  
## tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 2946 -0.7137 -0.6674 -0.7242  
## 2947 -0.6856 -0.4919 -0.5755  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY  
## 2946 -0.7041 0.7649 0.6219  
## 2947 -0.7188 0.7560 0.6444  
## tBodyGyroJerkminZ tBodyGyroJerksma tBodyGyroJerkenergyX  
## 2946 0.6417 -0.7054 -0.9584  
## 2947 0.7146 -0.6773 -0.9495  
## tBodyGyroJerkenergyY tBodyGyroJerkenergyZ tBodyGyroJerkiqrX  
## 2946 -0.9423 -0.9534 -0.7266  
## 2947 -0.9268 -0.9496 -0.7029  
## tBodyGyroJerkiqrY tBodyGyroJerkiqrZ tBodyGyroJerkentropyX  
## 2946 -0.7487 -0.7335 0.3121  
## 2947 -0.7423 -0.7001 0.3303  
## tBodyGyroJerkentropyY tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1  
## 2946 0.3721 0.5607 -0.08588  
## 2947 0.4513 0.5280 -0.09206  
## tBodyGyroJerkarCoeffX\_2 tBodyGyroJerkarCoeffX\_3  
## 2946 -0.005597 0.1814  
## 2947 0.035945 0.2388  
## tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 2946 -0.03688 -0.5227  
## 2947 0.17337 -0.3882  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3  
## 2946 0.5089 -0.06708  
## 2947 0.3050 0.13712  
## tBodyGyroJerkarCoeffY\_4 tBodyGyroJerkarCoeffZ\_1  
## 2946 -0.1101 -0.3565  
## 2947 -0.1236 -0.4239  
## tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 2946 0.2889 -0.2032  
## 2947 0.1717 -0.1051  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 2946 -0.009225 -0.2482  
## 2947 0.095357 -0.4560  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z  
## 2946 0.1200 -0.1480  
## 2947 -0.0283 -0.1323  
## tBodyAccMagmean tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax  
## 2946 -0.2339 -0.2927 -0.4264 -0.2045  
## 2947 -0.2243 -0.2625 -0.3667 -0.2673  
## tBodyAccMagmin tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr  
## 2946 -0.7161 -0.2339 -0.6875 -0.6061  
## 2947 -0.7161 -0.2243 -0.6760 -0.4948  
## tBodyAccMagentropy tBodyAccMagarCoeff1 tBodyAccMagarCoeff2  
## 2946 0.8126 -0.2798 0.1094  
## 2947 0.7745 -0.3519 0.1599  
## tBodyAccMagarCoeff3 tBodyAccMagarCoeff4 tGravityAccMagmean  
## 2946 0.1332 -0.01363 -0.2339  
## 2947 0.1510 -0.04613 -0.2243  
## tGravityAccMagstd tGravityAccMagmad tGravityAccMagmax  
## 2946 -0.2927 -0.4264 -0.2045  
## 2947 -0.2625 -0.3667 -0.2673  
## tGravityAccMagmin tGravityAccMagsma tGravityAccMagenergy  
## 2946 -0.7161 -0.2339 -0.6875  
## 2947 -0.7161 -0.2243 -0.6760  
## tGravityAccMagiqr tGravityAccMagentropy tGravityAccMagarCoeff1  
## 2946 -0.6061 0.8126 -0.2798  
## 2947 -0.4948 0.7745 -0.3519  
## tGravityAccMagarCoeff2 tGravityAccMagarCoeff3 tGravityAccMagarCoeff4  
## 2946 0.1094 0.1332 -0.01363  
## 2947 0.1599 0.1510 -0.04613  
## tBodyAccJerkMagmean tBodyAccJerkMagstd tBodyAccJerkMagmad  
## 2946 -0.4865 -0.3621 -0.4678  
## 2947 -0.4624 -0.3711 -0.4673  
## tBodyAccJerkMagmax tBodyAccJerkMagmin tBodyAccJerkMagsma  
## 2946 -0.3493 -0.7967 -0.4865  
## 2947 -0.3493 -0.5076 -0.4624  
## tBodyAccJerkMagenergy tBodyAccJerkMagiqr tBodyAccJerkMagentropy  
## 2946 -0.8391 -0.6464 0.5998  
## 2947 -0.8313 -0.6413 0.5737  
## tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 2946 -0.174 0.1405  
## 2947 -0.265 0.2766  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 2946 -0.01397 0.0499 -0.3790  
## 2947 -0.19790 0.1734 -0.4085  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 2946 -0.5472 -0.5110 -0.5464 -0.3693  
## 2947 -0.4940 -0.4442 -0.5052 -0.5919  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr  
## 2946 -0.3790 -0.8083 -0.6154  
## 2947 -0.4085 -0.8169 -0.5414  
## tBodyGyroMagentropy tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2  
## 2946 0.7975 -0.17590 0.07730  
## 2947 0.8237 0.01062 -0.04808  
## tBodyGyroMagarCoeff3 tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean  
## 2946 -0.1945 0.3657 -0.6967  
## 2947 -0.1502 0.2847 -0.6682  
## tBodyGyroJerkMagstd tBodyGyroJerkMagmad tBodyGyroJerkMagmax  
## 2946 -0.6583 -0.7113 -0.6037  
## 2947 -0.6083 -0.6617 -0.5856  
## tBodyGyroJerkMagmin tBodyGyroJerkMagsma tBodyGyroJerkMagenergy  
## 2946 -0.7993 -0.6967 -0.9470  
## 2947 -0.8057 -0.6682 -0.9343  
## tBodyGyroJerkMagiqr tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 2946 -0.7835 0.7760 0.2357  
## 2947 -0.7480 0.7449 0.1154  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 2946 -0.12756 -0.3877  
## 2947 -0.02266 -0.4550  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 2946 0.1905 -0.3784 -0.4001 -0.2823  
## 2947 0.2684 -0.4012 -0.3184 -0.2221  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 2946 -0.3024 -0.2000 -0.2287 -0.3080 -0.2777  
## 2947 -0.3039 -0.1863 -0.1982 -0.2694 -0.2423  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 2946 -0.1752 -0.3106 -0.4158 -0.3052 -0.7940  
## 2947 -0.1326 -0.4136 -0.4389 -0.4145 -0.6385  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 2946 -0.9357 -0.9031 -0.2587 -0.7690 -0.6986  
## 2947 -0.8718 -0.7610 -0.2249 -0.7737 -0.6713  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ  
## 2946 -0.6781 -0.4389 -0.7411 -0.3421  
## 2947 -0.6428 -0.7229 -0.6118 -0.3250  
## fBodyAccentropyX fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX  
## 2946 0.4969 0.2346 0.5330 -0.8065  
## 2947 0.2602 0.2371 0.4703 -0.8065  
## fBodyAccmaxIndsY fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY  
## 2946 -0.8000 -0.9231 -0.4053 -0.4110  
## 2947 -0.9333 -0.9231 -0.5378 -0.2095  
## fBodyAccmeanFreqZ fBodyAccskewnessX fBodyAcckurtosisX  
## 2946 -0.1192 0.23382 -0.05595  
## 2947 -0.0354 -0.05375 -0.47972  
## fBodyAccskewnessY fBodyAcckurtosisY fBodyAccskewnessZ  
## 2946 -0.1808 -0.5979 -0.4045  
## 2947 -0.2122 -0.6263 -0.5107  
## fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8 fBodyAccbandsEnergy9\_16  
## 2946 -0.6795 -0.7515 -0.8425  
## 2947 -0.7967 -0.7554 -0.8304  
## fBodyAccbandsEnergy17\_24 fBodyAccbandsEnergy25\_32  
## 2946 -0.8931 -0.9143  
## 2947 -0.9444 -0.9610  
## fBodyAccbandsEnergy33\_40 fBodyAccbandsEnergy41\_48  
## 2946 -0.9154 -0.8869  
## 2947 -0.9582 -0.8886  
## fBodyAccbandsEnergy49\_56 fBodyAccbandsEnergy57\_64  
## 2946 -0.9084 -0.9745  
## 2947 -0.9275 -0.9552  
## fBodyAccbandsEnergy1\_16 fBodyAccbandsEnergy17\_32  
## 2946 -0.7552 -0.8827  
## 2947 -0.7548 -0.9407  
## fBodyAccbandsEnergy33\_48 fBodyAccbandsEnergy49\_64  
## 2946 -0.9047 -0.9305  
## 2947 -0.9321 -0.9368  
## fBodyAccbandsEnergy1\_24 fBodyAccbandsEnergy25\_48  
## 2946 -0.7650 -0.8930  
## 2947 -0.7682 -0.9395  
## fBodyAccbandsEnergy1\_8.1 fBodyAccbandsEnergy9\_16.1  
## 2946 -0.6089 -0.9439  
## 2947 -0.5963 -0.9124  
## fBodyAccbandsEnergy17\_24.1 fBodyAccbandsEnergy25\_32.1  
## 2946 -0.9744 -0.9641  
## 2947 -0.9534 -0.9761  
## fBodyAccbandsEnergy33\_40.1 fBodyAccbandsEnergy41\_48.1  
## 2946 -0.9274 -0.9604  
## 2947 -0.9079 -0.9165  
## fBodyAccbandsEnergy49\_56.1 fBodyAccbandsEnergy57\_64.1  
## 2946 -0.9260 -0.9985  
## 2947 -0.8671 -0.8951  
## fBodyAccbandsEnergy1\_16.1 fBodyAccbandsEnergy17\_32.1  
## 2946 -0.6715 -0.9649  
## 2947 -0.6457 -0.9481  
## fBodyAccbandsEnergy33\_48.1 fBodyAccbandsEnergy49\_64.1  
## 2946 -0.9318 -0.9542  
## 2947 -0.9007 -0.8746  
## fBodyAccbandsEnergy1\_24.1 fBodyAccbandsEnergy25\_48.1  
## 2946 -0.6952 -0.9523  
## 2947 -0.6679 -0.9514  
## fBodyAccbandsEnergy1\_8.2 fBodyAccbandsEnergy9\_16.2  
## 2946 -0.722 -0.7513  
## 2947 -0.744 -0.6184  
## fBodyAccbandsEnergy17\_24.2 fBodyAccbandsEnergy25\_32.2  
## 2946 -0.8876 -0.9135  
## 2947 -0.8189 -0.9308  
## fBodyAccbandsEnergy33\_40.2 fBodyAccbandsEnergy41\_48.2  
## 2946 -0.9346 -0.9293  
## 2947 -0.9557 -0.9194  
## fBodyAccbandsEnergy49\_56.2 fBodyAccbandsEnergy57\_64.2  
## 2946 -0.9001 -0.9853  
## 2947 -0.8773 -0.9142  
## fBodyAccbandsEnergy1\_16.2 fBodyAccbandsEnergy17\_32.2  
## 2946 -0.6976 -0.8970  
## 2947 -0.6724 -0.8595  
## fBodyAccbandsEnergy33\_48.2 fBodyAccbandsEnergy49\_64.2  
## 2946 -0.9286 -0.9248  
## 2947 -0.9431 -0.8873  
## fBodyAccbandsEnergy1\_24.2 fBodyAccbandsEnergy25\_48.2  
## 2946 -0.6850 -0.9178  
## 2947 -0.6465 -0.9344  
## fBodyAccJerkmeanX fBodyAccJerkmeanY fBodyAccJerkmeanZ  
## 2946 -0.4261 -0.5838 -0.4392  
## 2947 -0.5238 -0.5972 -0.3569  
## fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ fBodyAccJerkmadX  
## 2946 -0.5122 -0.6031 -0.5397 -0.4279  
## 2947 -0.4785 -0.5659 -0.4753 -0.4643  
## fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX fBodyAccJerkmaxY  
## 2946 -0.6268 -0.4970 -0.5902 -0.6612  
## 2947 -0.5949 -0.4586 -0.4919 -0.5882  
## fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY fBodyAccJerkminZ  
## 2946 -0.5631 -0.619 -0.8729 -0.8281  
## 2947 -0.4217 -0.760 -0.9148 -0.3569  
## fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 2946 -0.3803 -0.8414 -0.9081  
## 2947 -0.3987 -0.8617 -0.9038  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY  
## 2946 -0.8645 -0.4450 -0.7344  
## 2947 -0.8239 -0.6726 -0.7370  
## fBodyAccJerkiqrZ fBodyAccJerkentropyX fBodyAccJerkentropyY  
## 2946 -0.483 0.2852 0.1829  
## 2947 -0.512 0.2921 0.1510  
## fBodyAccJerkentropyZ fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY  
## 2946 0.3922 -0.6 -0.52  
## 2947 0.3981 -0.6 -0.52  
## fBodyAccJerkmaxIndsZ fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY  
## 2946 -0.52 -0.06421 -0.1829  
## 2947 -0.52 -0.30472 -0.6287  
## fBodyAccJerkmeanFreqZ fBodyAccJerkskewnessX fBodyAccJerkkurtosisX  
## 2946 -0.3165 -0.1614 -0.6364  
## 2947 -0.1661 0.1840 -0.3262  
## fBodyAccJerkskewnessY fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ  
## 2946 -0.2350 -0.7481 -0.4000  
## 2947 -0.2035 -0.6728 -0.1518  
## fBodyAccJerkkurtosisZ fBodyAccJerkbandsEnergy1\_8  
## 2946 -0.7666 -0.8803  
## 2947 -0.5785 -0.8846  
## fBodyAccJerkbandsEnergy9\_16 fBodyAccJerkbandsEnergy17\_24  
## 2946 -0.8315 -0.9175  
## 2947 -0.8193 -0.9518  
## fBodyAccJerkbandsEnergy25\_32 fBodyAccJerkbandsEnergy33\_40  
## 2946 -0.9320 -0.9357  
## 2947 -0.9591 -0.9557  
## fBodyAccJerkbandsEnergy41\_48 fBodyAccJerkbandsEnergy49\_56  
## 2946 -0.8668 -0.7580  
## 2947 -0.8520 -0.9449  
## fBodyAccJerkbandsEnergy57\_64 fBodyAccJerkbandsEnergy1\_16  
## 2946 -0.9062 -0.8385  
## 2947 -0.9902 -0.8326  
## fBodyAccJerkbandsEnergy17\_32 fBodyAccJerkbandsEnergy33\_48  
## 2946 -0.9046 -0.9020  
## 2947 -0.9438 -0.9094  
## fBodyAccJerkbandsEnergy49\_64 fBodyAccJerkbandsEnergy1\_24  
## 2946 -0.7441 -0.8393  
## 2947 -0.9440 -0.8477  
## fBodyAccJerkbandsEnergy25\_48 fBodyAccJerkbandsEnergy1\_8.1  
## 2946 -0.8839 -0.7627  
## 2947 -0.9089 -0.7508  
## fBodyAccJerkbandsEnergy9\_16.1 fBodyAccJerkbandsEnergy17\_24.1  
## 2946 -0.9430 -0.9652  
## 2947 -0.9179 -0.9628  
## fBodyAccJerkbandsEnergy25\_32.1 fBodyAccJerkbandsEnergy33\_40.1  
## 2946 -0.9595 -0.9231  
## 2947 -0.9798 -0.9543  
## fBodyAccJerkbandsEnergy41\_48.1 fBodyAccJerkbandsEnergy49\_56.1  
## 2946 -0.9385 -0.8833  
## 2947 -0.9389 -0.9423  
## fBodyAccJerkbandsEnergy57\_64.1 fBodyAccJerkbandsEnergy1\_16.1  
## 2946 -0.8980 -0.8924  
## 2947 -0.9984 -0.8669  
## fBodyAccJerkbandsEnergy17\_32.1 fBodyAccJerkbandsEnergy33\_48.1  
## 2946 -0.9555 -0.9112  
## 2947 -0.9634 -0.9368  
## fBodyAccJerkbandsEnergy49\_64.1 fBodyAccJerkbandsEnergy1\_24.1  
## 2946 -0.8851 -0.9064  
## 2947 -0.9494 -0.8868  
## fBodyAccJerkbandsEnergy25\_48.1 fBodyAccJerkbandsEnergy1\_8.2  
## 2946 -0.9403 -0.8363  
## 2947 -0.9630 -0.8270  
## fBodyAccJerkbandsEnergy9\_16.2 fBodyAccJerkbandsEnergy17\_24.2  
## 2946 -0.7470 -0.8980  
## 2947 -0.6216 -0.8303  
## fBodyAccJerkbandsEnergy25\_32.2 fBodyAccJerkbandsEnergy33\_40.2  
## 2946 -0.9143 -0.9365  
## 2947 -0.9303 -0.9558  
## fBodyAccJerkbandsEnergy41\_48.2 fBodyAccJerkbandsEnergy49\_56.2  
## 2946 -0.9259 -0.8324  
## 2947 -0.9112 -0.7791  
## fBodyAccJerkbandsEnergy57\_64.2 fBodyAccJerkbandsEnergy1\_16.2  
## 2946 -0.9405 -0.7254  
## 2947 -0.3757 -0.6148  
## fBodyAccJerkbandsEnergy17\_32.2 fBodyAccJerkbandsEnergy33\_48.2  
## 2946 -0.9060 -0.9290  
## 2947 -0.8792 -0.9394  
## fBodyAccJerkbandsEnergy49\_64.2 fBodyAccJerkbandsEnergy1\_24.2  
## 2946 -0.8342 -0.8084  
## 2947 -0.7189 -0.7130  
## fBodyAccJerkbandsEnergy25\_48.2 fBodyGyromeanX fBodyGyromeanY  
## 2946 -0.9201 -0.6279 -0.5435  
## 2947 -0.9339 -0.5689 -0.5115  
## fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY fBodyGyrostdZ  
## 2946 -0.3680 -0.6817 -0.5656 -0.3944  
## 2947 -0.4533 -0.6331 -0.5102 -0.3366  
## fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX fBodyGyromaxY  
## 2946 -0.6358 -0.5422 -0.4070 -0.7085 -0.7224  
## 2947 -0.5922 -0.5149 -0.3557 -0.6070 -0.6615  
## fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ fBodyGyrosma  
## 2946 -0.4191 -0.9763 -0.8139 -0.8402 -0.5028  
## 2947 -0.3794 -0.8266 -0.8241 -0.9051 -0.4871  
## fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ fBodyGyroiqrX  
## 2946 -0.9443 -0.9002 -0.7819 -0.7087  
## 2947 -0.9259 -0.8783 -0.7626 -0.6705  
## fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX fBodyGyroentropyY  
## 2946 -0.5061 -0.6061 0.2207 0.5007  
## 2947 -0.6079 -0.6250 0.3378 0.4582  
## fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 2946 0.4057 -0.9333 -0.9355  
## 2947 0.3132 -0.9333 -0.2258  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 2946 -0.931 -0.2424 -0.116213  
## 2947 -0.931 -0.2406 0.006146  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 2946 0.04 -0.17519 -0.5781  
## 2947 -0.53 -0.03974 -0.3954  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 2946 -0.4997 -0.8493 0.2586  
## 2947 -0.4513 -0.8328 0.2286  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 2946 -0.008618 -0.9477 -0.9651  
## 2947 -0.047651 -0.9311 -0.9434  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 2946 -0.9725 -0.9725  
## 2947 -0.9710 -0.9788  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 2946 -0.9837 -0.9832  
## 2947 -0.9757 -0.9771  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 2946 -0.9728 -0.9903  
## 2947 -0.9661 -0.9840  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 2946 -0.9456 -0.9666  
## 2947 -0.9269 -0.9680  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 2946 -0.9819 -0.9805  
## 2947 -0.9738 -0.9740  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 2946 -0.9451 -0.9749  
## 2947 -0.9265 -0.9771  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 2946 -0.9241 -0.9327  
## 2947 -0.9259 -0.9085  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 2946 -0.9640 -0.9663  
## 2947 -0.9418 -0.9688  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 2946 -0.9948 -0.9718  
## 2947 -0.9886 -0.9466  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 2946 -0.9526 -0.9633  
## 2947 -0.9415 -0.9464  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 2946 -0.9051 -0.9561  
## 2947 -0.8906 -0.9361  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 2946 -0.9900 -0.9508  
## 2947 -0.9799 -0.9356  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 2946 -0.8946 -0.9711  
## 2947 -0.8705 -0.9699  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 2946 -0.8013 -0.9433  
## 2947 -0.7724 -0.9447  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 2946 -0.9588 -0.9572  
## 2947 -0.9793 -0.9912  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 2946 -0.9417 -0.9192  
## 2947 -0.9906 -0.9869  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 2946 -0.8621 -0.8012  
## 2947 -0.9872 -0.9976  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 2946 -0.7920 -0.9399  
## 2947 -0.7649 -0.9760  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 2946 -0.9354 -0.8356  
## 2947 -0.9896 -0.9917  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2  
## 2946 -0.7874 -0.9504  
## 2947 -0.7633 -0.9907  
## fBodyAccMagmean fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax  
## 2946 -0.3148 -0.3902 -0.2596 -0.6544  
## 2947 -0.2884 -0.3626 -0.2313 -0.6050  
## fBodyAccMagmin fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr  
## 2946 -0.8267 -0.3148 -0.7452 -0.5555  
## 2947 -0.7629 -0.2884 -0.7233 -0.5956  
## fBodyAccMagentropy fBodyAccMagmaxInds fBodyAccMagmeanFreq  
## 2946 0.4532 -0.5172 -0.12119  
## 2947 0.4504 -0.7931 -0.09413  
## fBodyAccMagskewness fBodyAccMagkurtosis fBodyBodyAccJerkMagmean  
## 2946 -0.4793 -0.8186 -0.3487  
## 2947 -0.4477 -0.7896 -0.3652  
## fBodyBodyAccJerkMagstd fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax  
## 2946 -0.3833 -0.3679 -0.4172  
## 2947 -0.3824 -0.3184 -0.4329  
## fBodyBodyAccJerkMagmin fBodyBodyAccJerkMagsma  
## 2946 -0.6007 -0.3487  
## 2947 -0.4810 -0.3652  
## fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 2946 -0.7915 -0.4764  
## 2947 -0.7973 -0.3577  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 2946 0.2004 -0.9048  
## 2947 0.2341 -0.9048  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 2946 -0.02203 0.04993  
## 2947 0.13626 -0.05451  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 2946 -0.3111 -0.6386 -0.5659  
## 2947 -0.4043 -0.5186 -0.5639  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 2946 -0.562 -0.6261 -0.9181  
## 2947 -0.541 -0.5881 -0.9412  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 2946 -0.6386 -0.8963 -0.7032  
## 2947 -0.5186 -0.8706 -0.5723  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds  
## 2946 0.3266 -0.8462  
## 2947 0.4922 -0.8462  
## fBodyBodyGyroMagmeanFreq fBodyBodyGyroMagskewness  
## 2946 -0.22090 -0.2670  
## 2947 0.03759 -0.3291  
## fBodyBodyGyroMagkurtosis fBodyBodyGyroJerkMagmean  
## 2946 -0.6581 -0.6797  
## 2947 -0.6485 -0.6160  
## fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 2946 -0.6550 -0.6312  
## 2947 -0.6252 -0.6000  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin  
## 2946 -0.6958 -0.7857  
## 2947 -0.6270 -0.8523  
## fBodyBodyGyroJerkMagsma fBodyBodyGyroJerkMagenergy  
## 2946 -0.6797 -0.9407  
## 2947 -0.6160 -0.9222  
## fBodyBodyGyroJerkMagiqr fBodyBodyGyroJerkMagentropy  
## 2946 -0.6363 0.2384  
## 2947 -0.6157 0.3337  
## fBodyBodyGyroJerkMagmaxInds fBodyBodyGyroJerkMagmeanFreq  
## 2946 -0.9048 -0.04647  
## 2947 -0.9048 -0.01039  
## fBodyBodyGyroJerkMagskewness fBodyBodyGyroJerkMagkurtosis  
## 2946 -0.20545 -0.6177  
## 2947 -0.07224 -0.4369  
## angletBodyAccMean\_gravity angletBodyAccJerkMean\_gravityMean  
## 2946 0.4446 -0.8192  
## 2947 0.5988 -0.2880  
## angletBodyGyroMean\_gravityMean angletBodyGyroJerkMean\_gravityMean  
## 2946 0.9293 -0.008398  
## 2947 0.8760 -0.024965  
## angleX\_gravityMean angleY\_gravityMean angleZ\_gravityMean  
## 2946 -0.6597 0.2648 0.1876  
## 2947 -0.6601 0.2639 0.1881

# Add 3 columns: subjectID, subjectType, activity to xData  
xData$subjecttype <- testOrTrain  
xData <- cbind(subjectData$subjectid,  
 xData$subjecttype,  
 activityData$activity,   
 xData[,1:561])  
  
# Rename these two new columns' names to subjectID and activity  
names(xData)[names(xData)=="subjectData$subjectid"] <- "subjectid"  
names(xData)[names(xData)=="xData$subjecttype"] <- "subjecttype"  
names(xData)[names(xData)=="activityData$activity"] <- "activity"  
print("New column names:")

## [1] "New column names:"

print(names(xData)[1]);print(names(xData)[2]);print(names(xData)[3])

## [1] "subjectid"

## [1] "subjecttype"

## [1] "activity"

print(tail(xData,n=1))

## subjectid subjecttype activity tBodyAccmeanX tBodyAccmeanY  
## 2947 24 test WALKING\_UPSTAIRS 0.1536 -0.01844  
## tBodyAccmeanZ tBodyAccstdX tBodyAccstdY tBodyAccstdZ tBodyAccmadX  
## 2947 -0.137 -0.33 -0.1953 -0.1643 -0.431  
## tBodyAccmadY tBodyAccmadZ tBodyAccmaxX tBodyAccmaxY tBodyAccmaxZ  
## 2947 -0.2183 -0.2299 -0.1115 -0.0785 -0.1634  
## tBodyAccminX tBodyAccminY tBodyAccminZ tBodyAccsma tBodyAccenergyX  
## 2947 0.2419 0.1682 0.2138 -0.2362 -0.7712  
## tBodyAccenergyY tBodyAccenergyZ tBodyAcciqrX tBodyAcciqrY  
## 2947 -0.8741 -0.6838 -0.6163 -0.4089  
## tBodyAcciqrZ tBodyAccentropyX tBodyAccentropyY tBodyAccentropyZ  
## 2947 -0.4272 0.02881 0.2134 0.2608  
## tBodyAccarCoeffX\_1 tBodyAccarCoeffX\_2 tBodyAccarCoeffX\_3  
## 2947 -0.2607 -0.05293 0.4066  
## tBodyAccarCoeffX\_4 tBodyAccarCoeffY\_1 tBodyAccarCoeffY\_2  
## 2947 -0.1511 -0.2428 0.02142  
## tBodyAccarCoeffY\_3 tBodyAccarCoeffY\_4 tBodyAccarCoeffZ\_1  
## 2947 0.338 -0.123 -0.3319  
## tBodyAccarCoeffZ\_2 tBodyAccarCoeffZ\_3 tBodyAccarCoeffZ\_4  
## 2947 0.2982 -0.001256 -0.1792  
## tBodyAcccorrelationX\_Y tBodyAcccorrelationX\_Z tBodyAcccorrelationY\_Z  
## 2947 -0.0803 -0.5229 0.05625  
## tGravityAccmeanX tGravityAccmeanY tGravityAccmeanZ tGravityAccstdX  
## 2947 0.8943 -0.2614 -0.2361 -0.9847  
## tGravityAccstdY tGravityAccstdZ tGravityAccmadX tGravityAccmadY  
## 2947 -0.9646 -0.9624 -0.9851 -0.9652  
## tGravityAccmadZ tGravityAccmaxX tGravityAccmaxY tGravityAccmaxZ  
## 2947 -0.9638 0.8254 -0.2728 -0.2338  
## tGravityAccminX tGravityAccminY tGravityAccminZ tGravityAccsma  
## 2947 0.909 -0.2428 -0.2451 0.1718  
## tGravityAccenergyX tGravityAccenergyY tGravityAccenergyZ  
## 2947 0.7214 -0.8857 -0.8844  
## tGravityAcciqrX tGravityAcciqrY tGravityAcciqrZ tGravityAccentropyX  
## 2947 -0.9861 -0.966 -0.9687 -0.5495  
## tGravityAccentropyY tGravityAccentropyZ tGravityAccarCoeffX\_1  
## 2947 -1 -1 -0.4299  
## tGravityAccarCoeffX\_2 tGravityAccarCoeffX\_3 tGravityAccarCoeffX\_4  
## 2947 0.4742 -0.5148 0.5515  
## tGravityAccarCoeffY\_1 tGravityAccarCoeffY\_2 tGravityAccarCoeffY\_3  
## 2947 -0.5619 0.5565 -0.5798  
## tGravityAccarCoeffY\_4 tGravityAccarCoeffZ\_1 tGravityAccarCoeffZ\_2  
## 2947 0.6141 -0.3194 0.3508  
## tGravityAccarCoeffZ\_3 tGravityAccarCoeffZ\_4 tGravityAcccorrelationX\_Y  
## 2947 -0.3812 0.4081 0.1287  
## tGravityAcccorrelationX\_Z tGravityAcccorrelationY\_Z tBodyAccJerkmeanX  
## 2947 -0.1541 -0.7441 0.2238  
## tBodyAccJerkmeanY tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY  
## 2947 0.2567 0.01282 -0.4791 -0.5688  
## tBodyAccJerkstdZ tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ  
## 2947 -0.4171 -0.4717 -0.5223 -0.4654  
## tBodyAccJerkmaxX tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX  
## 2947 -0.6606 -0.7302 -0.5673 0.2873  
## tBodyAccJerkminY tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX  
## 2947 0.7369 0.1615 -0.4512 -0.8619  
## tBodyAccJerkenergyY tBodyAccJerkenergyZ tBodyAccJerkiqrX  
## 2947 -0.9036 -0.824 -0.4182  
## tBodyAccJerkiqrY tBodyAccJerkiqrZ tBodyAccJerkentropyX  
## 2947 -0.5645 -0.5956 0.5859  
## tBodyAccJerkentropyY tBodyAccJerkentropyZ tBodyAccJerkarCoeffX\_1  
## 2947 0.5268 0.5353 -0.1968  
## tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3 tBodyAccJerkarCoeffX\_4  
## 2947 -0.2123 0.03821 0.3484  
## tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2 tBodyAccJerkarCoeffY\_3  
## 2947 -0.276 -0.1472 0.03006  
## tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1 tBodyAccJerkarCoeffZ\_2  
## 2947 0.4435 -0.3842 0.1677  
## tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 2947 0.03805 -0.02259  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 2947 -0.06815 -0.4918  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY  
## 2947 0.05515 -0.2082 -0.03865  
## tBodyGyromeanZ tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ  
## 2947 0.2461 -0.6167 -0.5086 -0.3139  
## tBodyGyromadX tBodyGyromadY tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY  
## 2947 -0.6119 -0.5445 -0.3233 -0.6659 -0.5998  
## tBodyGyromaxZ tBodyGyrominX tBodyGyrominY tBodyGyrominZ tBodyGyrosma  
## 2947 -0.2646 0.4306 0.5666 0.3205 -0.3741  
## tBodyGyroenergyX tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX  
## 2947 -0.9118 -0.8801 -0.7716 -0.6006  
## tBodyGyroiqrY tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY  
## 2947 -0.5855 -0.4323 -0.2483 0.1601  
## tBodyGyroentropyZ tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2  
## 2947 0.4692 -0.3018 0.1676  
## tBodyGyroarCoeffX\_3 tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1  
## 2947 0.2319 -0.3069 -0.3957  
## tBodyGyroarCoeffY\_2 tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4  
## 2947 0.4022 -0.1729 0.1857  
## tBodyGyroarCoeffZ\_1 tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3  
## 2947 -0.5027 0.3416 -0.07051  
## tBodyGyroarCoeffZ\_4 tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z  
## 2947 0.04242 -0.04779 0.3971  
## tBodyGyrocorrelationY\_Z tBodyGyroJerkmeanX tBodyGyroJerkmeanY  
## 2947 0.1237 -0.02815 0.1737  
## tBodyGyroJerkmeanZ tBodyGyroJerkstdX tBodyGyroJerkstdY  
## 2947 0.001373 -0.6858 -0.6194  
## tBodyGyroJerkstdZ tBodyGyroJerkmadX tBodyGyroJerkmadY  
## 2947 -0.6873 -0.6941 -0.6633  
## tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 2947 -0.6856 -0.4919 -0.5755  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY  
## 2947 -0.7188 0.756 0.6444  
## tBodyGyroJerkminZ tBodyGyroJerksma tBodyGyroJerkenergyX  
## 2947 0.7146 -0.6773 -0.9495  
## tBodyGyroJerkenergyY tBodyGyroJerkenergyZ tBodyGyroJerkiqrX  
## 2947 -0.9268 -0.9496 -0.7029  
## tBodyGyroJerkiqrY tBodyGyroJerkiqrZ tBodyGyroJerkentropyX  
## 2947 -0.7423 -0.7001 0.3303  
## tBodyGyroJerkentropyY tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1  
## 2947 0.4513 0.528 -0.09206  
## tBodyGyroJerkarCoeffX\_2 tBodyGyroJerkarCoeffX\_3  
## 2947 0.03595 0.2388  
## tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 2947 0.1734 -0.3882  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3  
## 2947 0.305 0.1371  
## tBodyGyroJerkarCoeffY\_4 tBodyGyroJerkarCoeffZ\_1  
## 2947 -0.1236 -0.4239  
## tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 2947 0.1717 -0.1051  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 2947 0.09536 -0.456  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z  
## 2947 -0.0283 -0.1323  
## tBodyAccMagmean tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax  
## 2947 -0.2243 -0.2625 -0.3667 -0.2673  
## tBodyAccMagmin tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr  
## 2947 -0.7161 -0.2243 -0.676 -0.4948  
## tBodyAccMagentropy tBodyAccMagarCoeff1 tBodyAccMagarCoeff2  
## 2947 0.7745 -0.3519 0.1599  
## tBodyAccMagarCoeff3 tBodyAccMagarCoeff4 tGravityAccMagmean  
## 2947 0.151 -0.04613 -0.2243  
## tGravityAccMagstd tGravityAccMagmad tGravityAccMagmax  
## 2947 -0.2625 -0.3667 -0.2673  
## tGravityAccMagmin tGravityAccMagsma tGravityAccMagenergy  
## 2947 -0.7161 -0.2243 -0.676  
## tGravityAccMagiqr tGravityAccMagentropy tGravityAccMagarCoeff1  
## 2947 -0.4948 0.7745 -0.3519  
## tGravityAccMagarCoeff2 tGravityAccMagarCoeff3 tGravityAccMagarCoeff4  
## 2947 0.1599 0.151 -0.04613  
## tBodyAccJerkMagmean tBodyAccJerkMagstd tBodyAccJerkMagmad  
## 2947 -0.4624 -0.3711 -0.4673  
## tBodyAccJerkMagmax tBodyAccJerkMagmin tBodyAccJerkMagsma  
## 2947 -0.3493 -0.5076 -0.4624  
## tBodyAccJerkMagenergy tBodyAccJerkMagiqr tBodyAccJerkMagentropy  
## 2947 -0.8313 -0.6413 0.5737  
## tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 2947 -0.265 0.2766  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 2947 -0.1979 0.1734 -0.4085  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 2947 -0.494 -0.4442 -0.5052 -0.5919  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr  
## 2947 -0.4085 -0.8169 -0.5414  
## tBodyGyroMagentropy tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2  
## 2947 0.8237 0.01062 -0.04808  
## tBodyGyroMagarCoeff3 tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean  
## 2947 -0.1502 0.2847 -0.6682  
## tBodyGyroJerkMagstd tBodyGyroJerkMagmad tBodyGyroJerkMagmax  
## 2947 -0.6083 -0.6617 -0.5856  
## tBodyGyroJerkMagmin tBodyGyroJerkMagsma tBodyGyroJerkMagenergy  
## 2947 -0.8057 -0.6682 -0.9343  
## tBodyGyroJerkMagiqr tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 2947 -0.748 0.7449 0.1154  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 2947 -0.02266 -0.455  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 2947 0.2684 -0.4012 -0.3184 -0.2221  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 2947 -0.3039 -0.1863 -0.1982 -0.2694 -0.2423  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 2947 -0.1326 -0.4136 -0.4389 -0.4145 -0.6385  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 2947 -0.8718 -0.761 -0.2249 -0.7737 -0.6713  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ  
## 2947 -0.6428 -0.7229 -0.6118 -0.325  
## fBodyAccentropyX fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX  
## 2947 0.2602 0.2371 0.4703 -0.8065  
## fBodyAccmaxIndsY fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY  
## 2947 -0.9333 -0.9231 -0.5378 -0.2095  
## fBodyAccmeanFreqZ fBodyAccskewnessX fBodyAcckurtosisX  
## 2947 -0.0354 -0.05375 -0.4797  
## fBodyAccskewnessY fBodyAcckurtosisY fBodyAccskewnessZ  
## 2947 -0.2122 -0.6263 -0.5107  
## fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8 fBodyAccbandsEnergy9\_16  
## 2947 -0.7967 -0.7554 -0.8304  
## fBodyAccbandsEnergy17\_24 fBodyAccbandsEnergy25\_32  
## 2947 -0.9444 -0.961  
## fBodyAccbandsEnergy33\_40 fBodyAccbandsEnergy41\_48  
## 2947 -0.9582 -0.8886  
## fBodyAccbandsEnergy49\_56 fBodyAccbandsEnergy57\_64  
## 2947 -0.9275 -0.9552  
## fBodyAccbandsEnergy1\_16 fBodyAccbandsEnergy17\_32  
## 2947 -0.7548 -0.9407  
## fBodyAccbandsEnergy33\_48 fBodyAccbandsEnergy49\_64  
## 2947 -0.9321 -0.9368  
## fBodyAccbandsEnergy1\_24 fBodyAccbandsEnergy25\_48  
## 2947 -0.7682 -0.9395  
## fBodyAccbandsEnergy1\_8.1 fBodyAccbandsEnergy9\_16.1  
## 2947 -0.5963 -0.9124  
## fBodyAccbandsEnergy17\_24.1 fBodyAccbandsEnergy25\_32.1  
## 2947 -0.9534 -0.9761  
## fBodyAccbandsEnergy33\_40.1 fBodyAccbandsEnergy41\_48.1  
## 2947 -0.9079 -0.9165  
## fBodyAccbandsEnergy49\_56.1 fBodyAccbandsEnergy57\_64.1  
## 2947 -0.8671 -0.8951  
## fBodyAccbandsEnergy1\_16.1 fBodyAccbandsEnergy17\_32.1  
## 2947 -0.6457 -0.9481  
## fBodyAccbandsEnergy33\_48.1 fBodyAccbandsEnergy49\_64.1  
## 2947 -0.9007 -0.8746  
## fBodyAccbandsEnergy1\_24.1 fBodyAccbandsEnergy25\_48.1  
## 2947 -0.6679 -0.9514  
## fBodyAccbandsEnergy1\_8.2 fBodyAccbandsEnergy9\_16.2  
## 2947 -0.744 -0.6184  
## fBodyAccbandsEnergy17\_24.2 fBodyAccbandsEnergy25\_32.2  
## 2947 -0.8189 -0.9308  
## fBodyAccbandsEnergy33\_40.2 fBodyAccbandsEnergy41\_48.2  
## 2947 -0.9557 -0.9194  
## fBodyAccbandsEnergy49\_56.2 fBodyAccbandsEnergy57\_64.2  
## 2947 -0.8773 -0.9142  
## fBodyAccbandsEnergy1\_16.2 fBodyAccbandsEnergy17\_32.2  
## 2947 -0.6724 -0.8595  
## fBodyAccbandsEnergy33\_48.2 fBodyAccbandsEnergy49\_64.2  
## 2947 -0.9431 -0.8873  
## fBodyAccbandsEnergy1\_24.2 fBodyAccbandsEnergy25\_48.2  
## 2947 -0.6465 -0.9344  
## fBodyAccJerkmeanX fBodyAccJerkmeanY fBodyAccJerkmeanZ  
## 2947 -0.5238 -0.5972 -0.3569  
## fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ fBodyAccJerkmadX  
## 2947 -0.4785 -0.5659 -0.4753 -0.4643  
## fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX fBodyAccJerkmaxY  
## 2947 -0.5949 -0.4586 -0.4919 -0.5882  
## fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY fBodyAccJerkminZ  
## 2947 -0.4217 -0.76 -0.9148 -0.3569  
## fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 2947 -0.3987 -0.8617 -0.9038  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY  
## 2947 -0.8239 -0.6726 -0.737  
## fBodyAccJerkiqrZ fBodyAccJerkentropyX fBodyAccJerkentropyY  
## 2947 -0.512 0.2921 0.151  
## fBodyAccJerkentropyZ fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY  
## 2947 0.3981 -0.6 -0.52  
## fBodyAccJerkmaxIndsZ fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY  
## 2947 -0.52 -0.3047 -0.6287  
## fBodyAccJerkmeanFreqZ fBodyAccJerkskewnessX fBodyAccJerkkurtosisX  
## 2947 -0.1661 0.184 -0.3262  
## fBodyAccJerkskewnessY fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ  
## 2947 -0.2035 -0.6728 -0.1518  
## fBodyAccJerkkurtosisZ fBodyAccJerkbandsEnergy1\_8  
## 2947 -0.5785 -0.8846  
## fBodyAccJerkbandsEnergy9\_16 fBodyAccJerkbandsEnergy17\_24  
## 2947 -0.8193 -0.9518  
## fBodyAccJerkbandsEnergy25\_32 fBodyAccJerkbandsEnergy33\_40  
## 2947 -0.9591 -0.9557  
## fBodyAccJerkbandsEnergy41\_48 fBodyAccJerkbandsEnergy49\_56  
## 2947 -0.852 -0.9449  
## fBodyAccJerkbandsEnergy57\_64 fBodyAccJerkbandsEnergy1\_16  
## 2947 -0.9902 -0.8326  
## fBodyAccJerkbandsEnergy17\_32 fBodyAccJerkbandsEnergy33\_48  
## 2947 -0.9438 -0.9094  
## fBodyAccJerkbandsEnergy49\_64 fBodyAccJerkbandsEnergy1\_24  
## 2947 -0.944 -0.8477  
## fBodyAccJerkbandsEnergy25\_48 fBodyAccJerkbandsEnergy1\_8.1  
## 2947 -0.9089 -0.7508  
## fBodyAccJerkbandsEnergy9\_16.1 fBodyAccJerkbandsEnergy17\_24.1  
## 2947 -0.9179 -0.9628  
## fBodyAccJerkbandsEnergy25\_32.1 fBodyAccJerkbandsEnergy33\_40.1  
## 2947 -0.9798 -0.9543  
## fBodyAccJerkbandsEnergy41\_48.1 fBodyAccJerkbandsEnergy49\_56.1  
## 2947 -0.9389 -0.9423  
## fBodyAccJerkbandsEnergy57\_64.1 fBodyAccJerkbandsEnergy1\_16.1  
## 2947 -0.9984 -0.8669  
## fBodyAccJerkbandsEnergy17\_32.1 fBodyAccJerkbandsEnergy33\_48.1  
## 2947 -0.9634 -0.9368  
## fBodyAccJerkbandsEnergy49\_64.1 fBodyAccJerkbandsEnergy1\_24.1  
## 2947 -0.9494 -0.8868  
## fBodyAccJerkbandsEnergy25\_48.1 fBodyAccJerkbandsEnergy1\_8.2  
## 2947 -0.963 -0.827  
## fBodyAccJerkbandsEnergy9\_16.2 fBodyAccJerkbandsEnergy17\_24.2  
## 2947 -0.6216 -0.8303  
## fBodyAccJerkbandsEnergy25\_32.2 fBodyAccJerkbandsEnergy33\_40.2  
## 2947 -0.9303 -0.9558  
## fBodyAccJerkbandsEnergy41\_48.2 fBodyAccJerkbandsEnergy49\_56.2  
## 2947 -0.9112 -0.7791  
## fBodyAccJerkbandsEnergy57\_64.2 fBodyAccJerkbandsEnergy1\_16.2  
## 2947 -0.3757 -0.6148  
## fBodyAccJerkbandsEnergy17\_32.2 fBodyAccJerkbandsEnergy33\_48.2  
## 2947 -0.8792 -0.9394  
## fBodyAccJerkbandsEnergy49\_64.2 fBodyAccJerkbandsEnergy1\_24.2  
## 2947 -0.7189 -0.713  
## fBodyAccJerkbandsEnergy25\_48.2 fBodyGyromeanX fBodyGyromeanY  
## 2947 -0.9339 -0.5689 -0.5115  
## fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY fBodyGyrostdZ  
## 2947 -0.4533 -0.6331 -0.5102 -0.3366  
## fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX fBodyGyromaxY  
## 2947 -0.5922 -0.5149 -0.3557 -0.607 -0.6615  
## fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ fBodyGyrosma  
## 2947 -0.3794 -0.8266 -0.8241 -0.9051 -0.4871  
## fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ fBodyGyroiqrX  
## 2947 -0.9259 -0.8783 -0.7626 -0.6705  
## fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX fBodyGyroentropyY  
## 2947 -0.6079 -0.625 0.3378 0.4582  
## fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 2947 0.3132 -0.9333 -0.2258  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 2947 -0.931 -0.2406 0.006146  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 2947 -0.53 -0.03974 -0.3954  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 2947 -0.4513 -0.8328 0.2286  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 2947 -0.04765 -0.9311 -0.9434  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 2947 -0.971 -0.9788  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 2947 -0.9757 -0.9771  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 2947 -0.9661 -0.984  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 2947 -0.9269 -0.968  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 2947 -0.9738 -0.974  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 2947 -0.9265 -0.9771  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 2947 -0.9259 -0.9085  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 2947 -0.9418 -0.9688  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 2947 -0.9886 -0.9466  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 2947 -0.9415 -0.9464  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 2947 -0.8906 -0.9361  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 2947 -0.9799 -0.9356  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 2947 -0.8705 -0.9699  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 2947 -0.7724 -0.9447  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 2947 -0.9793 -0.9912  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 2947 -0.9906 -0.9869  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 2947 -0.9872 -0.9976  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 2947 -0.7649 -0.976  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 2947 -0.9896 -0.9917  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2  
## 2947 -0.7633 -0.9907  
## fBodyAccMagmean fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax  
## 2947 -0.2884 -0.3626 -0.2313 -0.605  
## fBodyAccMagmin fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr  
## 2947 -0.7629 -0.2884 -0.7233 -0.5956  
## fBodyAccMagentropy fBodyAccMagmaxInds fBodyAccMagmeanFreq  
## 2947 0.4504 -0.7931 -0.09413  
## fBodyAccMagskewness fBodyAccMagkurtosis fBodyBodyAccJerkMagmean  
## 2947 -0.4477 -0.7896 -0.3652  
## fBodyBodyAccJerkMagstd fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax  
## 2947 -0.3824 -0.3184 -0.4329  
## fBodyBodyAccJerkMagmin fBodyBodyAccJerkMagsma  
## 2947 -0.481 -0.3652  
## fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 2947 -0.7973 -0.3577  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 2947 0.2341 -0.9048  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 2947 0.1363 -0.05451  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 2947 -0.4043 -0.5186 -0.5639  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 2947 -0.541 -0.5881 -0.9412  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 2947 -0.5186 -0.8706 -0.5723  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds  
## 2947 0.4922 -0.8462  
## fBodyBodyGyroMagmeanFreq fBodyBodyGyroMagskewness  
## 2947 0.03759 -0.3291  
## fBodyBodyGyroMagkurtosis fBodyBodyGyroJerkMagmean  
## 2947 -0.6485 -0.616  
## fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 2947 -0.6252 -0.6  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin  
## 2947 -0.627 -0.8523  
## fBodyBodyGyroJerkMagsma fBodyBodyGyroJerkMagenergy  
## 2947 -0.616 -0.9222  
## fBodyBodyGyroJerkMagiqr fBodyBodyGyroJerkMagentropy  
## 2947 -0.6157 0.3337  
## fBodyBodyGyroJerkMagmaxInds fBodyBodyGyroJerkMagmeanFreq  
## 2947 -0.9048 -0.01039  
## fBodyBodyGyroJerkMagskewness fBodyBodyGyroJerkMagkurtosis  
## 2947 -0.07224 -0.4369  
## angletBodyAccMean\_gravity angletBodyAccJerkMean\_gravityMean  
## 2947 0.5988 -0.288  
## angletBodyGyroMean\_gravityMean angletBodyGyroJerkMean\_gravityMean  
## 2947 0.876 -0.02497  
## angleX\_gravityMean angleY\_gravityMean angleZ\_gravityMean  
## 2947 -0.6601 0.2639 0.1881

xData\_test = xData  
  
# !!!!!  
# Read in train datasets  
testOrTrain <- "train"  
  
subDir <- paste(dataDir,"/",testOrTrain,sep="")  
  
# First read in subject\_?.txt, the vector of subjectID  
# corresponding to each row of record in X\_?.txt  
filename = paste(subDir,"/subject\_",testOrTrain,".txt",sep="")  
subjectData <- read.table(filename,  
 header = FALSE,  
 sep = " ",  
 col.names = c("subjectid"),  
 colClasses = c("integer"),  
 strip.white = TRUE)  
head(subjectData,n=2)

## subjectid  
## 1 1  
## 2 1

tail(subjectData,n=2)

## subjectid  
## 7351 30  
## 7352 30

# Next read in y\_test.txt, the vector of activites  
# corresponding to each row of record in X\_test.txt  
filename = paste(subDir,"/y\_",testOrTrain,".txt",sep="")  
activityData <- read.table(filename,  
 header = FALSE,  
 sep = " ",  
 col.names = c("activityid"),  
 colClasses = c("factor"),  
 strip.white = TRUE)  
head(activityData,n=2)

## activityid  
## 1 5  
## 2 5

tail(activityData,n=2)

## activityid  
## 7351 2  
## 7352 2

# Added a column in activityTest by looking up the activityid value in activityMap  
activityData <- mutate(activityData,   
 activity=activityMap[match(activityid, activityMap$activityid, nomatch=0),2])  
head(activityData,n=2)

## activityid activity  
## 1 5 STANDING  
## 2 5 STANDING

tail(activityData,n=2)

## activityid activity  
## 7351 2 WALKING\_UPSTAIRS  
## 7352 2 WALKING\_UPSTAIRS

# Read in the X data set  
filename = paste(subDir,"/X\_",testOrTrain,".txt",sep="")  
xData <- read.table(filename,  
 header = FALSE,  
 col.names = varnames)  
head(xData,n=2)

## tBodyAccmeanX tBodyAccmeanY tBodyAccmeanZ tBodyAccstdX tBodyAccstdY  
## 1 0.2886 -0.02029 -0.1329 -0.9953 -0.9831  
## 2 0.2784 -0.01641 -0.1235 -0.9982 -0.9753  
## tBodyAccstdZ tBodyAccmadX tBodyAccmadY tBodyAccmadZ tBodyAccmaxX  
## 1 -0.9135 -0.9951 -0.9832 -0.9235 -0.9347  
## 2 -0.9603 -0.9988 -0.9749 -0.9577 -0.9431  
## tBodyAccmaxY tBodyAccmaxZ tBodyAccminX tBodyAccminY tBodyAccminZ  
## 1 -0.5674 -0.7444 0.8529 0.6858 0.8143  
## 2 -0.5579 -0.8184 0.8493 0.6858 0.8226  
## tBodyAccsma tBodyAccenergyX tBodyAccenergyY tBodyAccenergyZ tBodyAcciqrX  
## 1 -0.9655 -0.9999 -0.9999 -0.9946 -0.9942  
## 2 -0.9819 -1.0000 -0.9998 -0.9984 -0.9992  
## tBodyAcciqrY tBodyAcciqrZ tBodyAccentropyX tBodyAccentropyY  
## 1 -0.9876 -0.9432 -0.4077 -0.6793  
## 2 -0.9779 -0.9482 -0.7149 -0.5009  
## tBodyAccentropyZ tBodyAccarCoeffX\_1 tBodyAccarCoeffX\_2  
## 1 -0.6021 0.9293 -0.8530  
## 2 -0.5710 0.6116 -0.3295  
## tBodyAccarCoeffX\_3 tBodyAccarCoeffX\_4 tBodyAccarCoeffY\_1  
## 1 0.3599 -0.05853 0.2569  
## 2 0.2842 0.28459 0.1157  
## tBodyAccarCoeffY\_2 tBodyAccarCoeffY\_3 tBodyAccarCoeffY\_4  
## 1 -0.22485 0.2641 -0.09525  
## 2 -0.09096 0.2943 -0.28121  
## tBodyAccarCoeffZ\_1 tBodyAccarCoeffZ\_2 tBodyAccarCoeffZ\_3  
## 1 0.27885 -0.46508 0.49194  
## 2 0.08599 -0.02215 -0.01666  
## tBodyAccarCoeffZ\_4 tBodyAcccorrelationX\_Y tBodyAcccorrelationX\_Z  
## 1 -0.1909 0.37631 0.43513  
## 2 -0.2206 -0.01343 -0.07269  
## tBodyAcccorrelationY\_Z tGravityAccmeanX tGravityAccmeanY  
## 1 0.6608 0.9634 -0.1408  
## 2 0.5794 0.9666 -0.1416  
## tGravityAccmeanZ tGravityAccstdX tGravityAccstdY tGravityAccstdZ  
## 1 0.1154 -0.9852 -0.9817 -0.8776  
## 2 0.1094 -0.9974 -0.9894 -0.9316  
## tGravityAccmadX tGravityAccmadY tGravityAccmadZ tGravityAccmaxX  
## 1 -0.9850 -0.9844 -0.8947 0.8921  
## 2 -0.9979 -0.9896 -0.9332 0.8921  
## tGravityAccmaxY tGravityAccmaxZ tGravityAccminX tGravityAccminY  
## 1 -0.1613 0.1247 0.9774 -0.1232  
## 2 -0.1613 0.1226 0.9845 -0.1149  
## tGravityAccminZ tGravityAccsma tGravityAccenergyX tGravityAccenergyY  
## 1 0.05648 -0.3754 0.8995 -0.9709  
## 2 0.10276 -0.3834 0.9078 -0.9706  
## tGravityAccenergyZ tGravityAcciqrX tGravityAcciqrY tGravityAcciqrZ  
## 1 -0.9755 -0.9843 -0.9888 -0.9177  
## 2 -0.9785 -0.9992 -0.9900 -0.9417  
## tGravityAccentropyX tGravityAccentropyY tGravityAccentropyZ  
## 1 -1 -1 0.1138  
## 2 -1 -1 -0.2105  
## tGravityAccarCoeffX\_1 tGravityAccarCoeffX\_2 tGravityAccarCoeffX\_3  
## 1 -0.5904 0.5911 -0.5918  
## 2 -0.4101 0.4139 -0.4176  
## tGravityAccarCoeffX\_4 tGravityAccarCoeffY\_1 tGravityAccarCoeffY\_2  
## 1 0.5925 -0.7454 0.7209  
## 2 0.4213 -0.1964 0.1253  
## tGravityAccarCoeffY\_3 tGravityAccarCoeffY\_4 tGravityAccarCoeffZ\_1  
## 1 -0.7124 0.7113 -0.9951  
## 2 -0.1056 0.1091 -0.8339  
## tGravityAccarCoeffZ\_2 tGravityAccarCoeffZ\_3 tGravityAccarCoeffZ\_4  
## 1 0.9957 -0.9957 0.9917  
## 2 0.8343 -0.8342 0.8305  
## tGravityAcccorrelationX\_Y tGravityAcccorrelationX\_Z  
## 1 0.5702 0.4390  
## 2 -0.8313 -0.8657  
## tGravityAcccorrelationY\_Z tBodyAccJerkmeanX tBodyAccJerkmeanY  
## 1 0.9869 0.07800 0.005001  
## 2 0.9744 0.07401 0.005771  
## tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY tBodyAccJerkstdZ  
## 1 -0.06783 -0.9935 -0.9884 -0.9936  
## 2 0.02938 -0.9955 -0.9811 -0.9918  
## tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ tBodyAccJerkmaxX  
## 1 -0.9945 -0.9862 -0.9928 -0.9852  
## 2 -0.9956 -0.9789 -0.9913 -0.9945  
## tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX tBodyAccJerkminY  
## 1 -0.9920 -0.9931 0.9898 0.9920  
## 2 -0.9791 -0.9923 0.9926 0.9918  
## tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX tBodyAccJerkenergyY  
## 1 0.9905 -0.9935 -0.9999 -0.9998  
## 2 0.9885 -0.9914 -1.0000 -0.9996  
## tBodyAccJerkenergyZ tBodyAccJerkiqrX tBodyAccJerkiqrY tBodyAccJerkiqrZ  
## 1 -0.9999 -0.9944 -0.9860 -0.9892  
## 2 -0.9998 -0.9939 -0.9794 -0.9934  
## tBodyAccJerkentropyX tBodyAccJerkentropyY tBodyAccJerkentropyZ  
## 1 -0.8199 -0.7930 -0.8889  
## 2 -0.8751 -0.6554 -0.7674  
## tBodyAccJerkarCoeffX\_1 tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3  
## 1 1.0000 -0.2207 0.6368  
## 2 0.4897 0.0710 0.3627  
## tBodyAccJerkarCoeffX\_4 tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2  
## 1 0.3876 0.2414 -0.05225  
## 2 0.5273 0.1494 0.06293  
## tBodyAccJerkarCoeffY\_3 tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1  
## 1 0.2642 0.3734 0.3418  
## 2 0.3705 0.4135 0.1222  
## tBodyAccJerkarCoeffZ\_2 tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 1 -0.5698 0.26540 -0.4779  
## 2 0.1806 0.04742 0.1666  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 1 -0.3853 0.03364  
## 2 -0.2088 0.08410  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY tBodyGyromeanZ  
## 1 -0.1265 -0.006101 -0.03136 0.1077  
## 2 -0.2686 -0.016112 -0.08389 0.1006  
## tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ tBodyGyromadX tBodyGyromadY  
## 1 -0.9853 -0.9766 -0.9922 -0.9846 -0.9764  
## 2 -0.9831 -0.9890 -0.9891 -0.9869 -0.9890  
## tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY tBodyGyromaxZ tBodyGyrominX  
## 1 -0.9924 -0.8670 -0.9338 -0.7476 0.8473  
## 2 -0.9892 -0.8649 -0.9536 -0.7459 0.8337  
## tBodyGyrominY tBodyGyrominZ tBodyGyrosma tBodyGyroenergyX  
## 1 0.9149 0.8308 -0.9672 -0.9996  
## 2 0.9081 0.8289 -0.9806 -0.9998  
## tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX tBodyGyroiqrY  
## 1 -0.9994 -0.9998 -0.9834 -0.9786  
## 2 -0.9999 -0.9998 -0.9928 -0.9893  
## tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY tBodyGyroentropyZ  
## 1 -0.9930 0.082632 0.2023 -0.1688  
## 2 -0.9902 0.007469 -0.5312 -0.1774  
## tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2 tBodyGyroarCoeffX\_3  
## 1 0.09632 -0.2750 0.4986  
## 2 -0.38768 0.1791 0.2108  
## tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1 tBodyGyroarCoeffY\_2  
## 1 -0.2203 1.00000 -0.97297  
## 2 -0.1403 -0.04703 -0.06495  
## tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4 tBodyGyroarCoeffZ\_1  
## 1 0.3167 0.37573 0.72340  
## 2 0.1177 0.08169 0.04236  
## tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3 tBodyGyroarCoeffZ\_4  
## 1 -0.7711 0.6902 -0.3318  
## 2 -0.1499 0.2926 -0.1494  
## tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z tBodyGyrocorrelationY\_Z  
## 1 0.70958 0.1349 0.3011  
## 2 0.04672 -0.2569 0.1694  
## tBodyGyroJerkmeanX tBodyGyroJerkmeanY tBodyGyroJerkmeanZ  
## 1 -0.09917 -0.05552 -0.06199  
## 2 -0.11050 -0.04482 -0.05924  
## tBodyGyroJerkstdX tBodyGyroJerkstdY tBodyGyroJerkstdZ tBodyGyroJerkmadX  
## 1 -0.9921 -0.9925 -0.9921 -0.9922  
## 2 -0.9899 -0.9973 -0.9939 -0.9899  
## tBodyGyroJerkmadY tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 1 -0.9949 -0.9926 -0.9902 -0.9867  
## 2 -0.9975 -0.9938 -0.9919 -0.9977  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY tBodyGyroJerkminZ  
## 1 -0.9920 0.9944 0.9918 0.9894  
## 2 -0.9949 0.9905 0.9971 0.9945  
## tBodyGyroJerksma tBodyGyroJerkenergyX tBodyGyroJerkenergyY  
## 1 -0.9945 -0.9999 -1  
## 2 -0.9953 -0.9999 -1  
## tBodyGyroJerkenergyZ tBodyGyroJerkiqrX tBodyGyroJerkiqrY  
## 1 -0.9999 -0.9923 -0.9969  
## 2 -0.9999 -0.9907 -0.9973  
## tBodyGyroJerkiqrZ tBodyGyroJerkentropyX tBodyGyroJerkentropyY  
## 1 -0.9922 -0.5899 -0.6885  
## 2 -0.9938 -0.6009 -0.7482  
## tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1 tBodyGyroJerkarCoeffX\_2  
## 1 -0.5721 0.2924 -0.36200  
## 2 -0.6089 -0.1933 -0.06741  
## tBodyGyroJerkarCoeffX\_3 tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 1 0.4055 -0.03901 0.98928  
## 2 0.1856 0.04152 0.07235  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3 tBodyGyroJerkarCoeffY\_4  
## 1 -0.41456 0.3916 0.2823  
## 2 -0.03538 0.1776 0.0275  
## tBodyGyroJerkarCoeffZ\_1 tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 1 0.9273 -0.5724 0.6916  
## 2 0.1827 -0.1675 0.2533  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 1 0.4683 -0.1311  
## 2 0.1323 0.2939  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z tBodyAccMagmean  
## 1 -0.08716 0.3362 -0.9594  
## 2 -0.01808 -0.3433 -0.9793  
## tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax tBodyAccMagmin  
## 1 -0.9506 -0.9580 -0.9463 -0.9926  
## 2 -0.9761 -0.9782 -0.9787 -0.9953  
## tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr tBodyAccMagentropy  
## 1 -0.9594 -0.9985 -0.9576 -0.2326  
## 2 -0.9793 -0.9995 -0.9812 -0.4419  
## tBodyAccMagarCoeff1 tBodyAccMagarCoeff2 tBodyAccMagarCoeff3  
## 1 -0.17318 -0.0229 0.09483  
## 2 0.08157 -0.1094 0.31176  
## tBodyAccMagarCoeff4 tGravityAccMagmean tGravityAccMagstd  
## 1 0.1918 -0.9594 -0.9506  
## 2 -0.4117 -0.9793 -0.9761  
## tGravityAccMagmad tGravityAccMagmax tGravityAccMagmin tGravityAccMagsma  
## 1 -0.9580 -0.9463 -0.9926 -0.9594  
## 2 -0.9782 -0.9787 -0.9953 -0.9793  
## tGravityAccMagenergy tGravityAccMagiqr tGravityAccMagentropy  
## 1 -0.9985 -0.9576 -0.2326  
## 2 -0.9995 -0.9812 -0.4419  
## tGravityAccMagarCoeff1 tGravityAccMagarCoeff2 tGravityAccMagarCoeff3  
## 1 -0.17318 -0.0229 0.09483  
## 2 0.08157 -0.1094 0.31176  
## tGravityAccMagarCoeff4 tBodyAccJerkMagmean tBodyAccJerkMagstd  
## 1 0.1918 -0.9933 -0.9943  
## 2 -0.4117 -0.9913 -0.9917  
## tBodyAccJerkMagmad tBodyAccJerkMagmax tBodyAccJerkMagmin  
## 1 -0.9945 -0.9928 -0.9912  
## 2 -0.9927 -0.9887 -0.9912  
## tBodyAccJerkMagsma tBodyAccJerkMagenergy tBodyAccJerkMagiqr  
## 1 -0.9933 -0.9999 -0.9929  
## 2 -0.9913 -0.9998 -0.9935  
## tBodyAccJerkMagentropy tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 1 -0.8634 0.2831 -0.2373  
## 2 -0.8199 0.4588 -0.2449  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 1 -0.10543 -0.03821 -0.9690  
## 2 0.05614 -0.45835 -0.9807  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 1 -0.9643 -0.9572 -0.9751 -0.9916  
## 2 -0.9838 -0.9820 -0.9847 -0.9916  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr tBodyGyroMagentropy  
## 1 -0.9690 -0.9993 -0.9498 0.07258  
## 2 -0.9807 -0.9997 -0.9829 -0.19290  
## tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2 tBodyGyroMagarCoeff3  
## 1 0.5725 -0.73860 0.2126  
## 2 -0.2253 -0.01706 0.1558  
## tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean tBodyGyroJerkMagstd  
## 1 0.43340 -0.9942 -0.9914  
## 2 0.08258 -0.9951 -0.9961  
## tBodyGyroJerkMagmad tBodyGyroJerkMagmax tBodyGyroJerkMagmin  
## 1 -0.9931 -0.9889 -0.9935  
## 2 -0.9958 -0.9965 -0.9920  
## tBodyGyroJerkMagsma tBodyGyroJerkMagenergy tBodyGyroJerkMagiqr  
## 1 -0.9942 -0.9999 -0.9945  
## 2 -0.9951 -1.0000 -0.9948  
## tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 1 -0.6198 0.2928  
## 2 -0.7307 0.2093  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 1 -0.1769 -0.1458  
## 2 -0.1781 -0.1031  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 1 -0.12407 -0.9948 -0.9830 -0.9393  
## 2 -0.04382 -0.9975 -0.9769 -0.9735  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 1 -0.9954 -0.9831 -0.9062 -0.9969 -0.9845  
## 2 -0.9987 -0.9749 -0.9554 -0.9979 -0.9769  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 1 -0.9321 -0.9938 -0.9832 -0.8851 -0.9940  
## 2 -0.9684 -0.9994 -0.9738 -0.9488 -0.9983  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 1 -0.9934 -0.9234 -0.9747 -1 -0.9997  
## 2 -0.9927 -0.9895 -0.9858 -1 -0.9994  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ fBodyAccentropyX  
## 1 -0.9949 -0.9959 -0.9897 -0.9880 -0.9464  
## 2 -0.9986 -0.9949 -0.9808 -0.9858 -1.0000  
## fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX fBodyAccmaxIndsY  
## 1 -0.9047 -0.5913 -1.00000 -1  
## 2 -0.9047 -0.7584 0.09677 -1  
## fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY fBodyAccmeanFreqZ  
## 1 -1 0.2525 0.13184 -0.05205  
## 2 -1 0.2713 0.04286 -0.01431  
## fBodyAccskewnessX fBodyAcckurtosisX fBodyAccskewnessY fBodyAcckurtosisY  
## 1 0.1421 -0.1507 -0.22055 -0.5587  
## 2 -0.6925 -0.9540 -0.04971 -0.3320  
## fBodyAccskewnessZ fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8  
## 1 0.24677 -0.007416 -1  
## 2 0.05668 -0.289001 -1  
## fBodyAccbandsEnergy9\_16 fBodyAccbandsEnergy17\_24  
## 1 -1 -1.0000  
## 2 -1 -0.9999  
## fBodyAccbandsEnergy25\_32 fBodyAccbandsEnergy33\_40  
## 1 -1 -0.9999  
## 2 -1 -0.9999  
## fBodyAccbandsEnergy41\_48 fBodyAccbandsEnergy49\_56  
## 1 -0.9997 -0.9997  
## 2 -0.9999 -1.0000  
## fBodyAccbandsEnergy57\_64 fBodyAccbandsEnergy1\_16  
## 1 -1 -1  
## 2 -1 -1  
## fBodyAccbandsEnergy17\_32 fBodyAccbandsEnergy33\_48  
## 1 -1.0000 -0.9999  
## 2 -0.9999 -0.9999  
## fBodyAccbandsEnergy49\_64 fBodyAccbandsEnergy1\_24  
## 1 -0.9998 -1  
## 2 -1.0000 -1  
## fBodyAccbandsEnergy25\_48 fBodyAccbandsEnergy1\_8.1  
## 1 -0.9999 -0.9997  
## 2 -0.9999 -0.9994  
## fBodyAccbandsEnergy9\_16.1 fBodyAccbandsEnergy17\_24.1  
## 1 -0.9999 -0.9999  
## 2 -0.9998 -0.9996  
## fBodyAccbandsEnergy25\_32.1 fBodyAccbandsEnergy33\_40.1  
## 1 -0.9999 -0.9997  
## 2 -0.9999 -0.9995  
## fBodyAccbandsEnergy41\_48.1 fBodyAccbandsEnergy49\_56.1  
## 1 -0.9997 -0.9995  
## 2 -0.9997 -0.9996  
## fBodyAccbandsEnergy57\_64.1 fBodyAccbandsEnergy1\_16.1  
## 1 -0.9998 -0.9997  
## 2 -0.9999 -0.9995  
## fBodyAccbandsEnergy17\_32.1 fBodyAccbandsEnergy33\_48.1  
## 1 -0.9998 -0.9997  
## 2 -0.9996 -0.9996  
## fBodyAccbandsEnergy49\_64.1 fBodyAccbandsEnergy1\_24.1  
## 1 -0.9996 -0.9997  
## 2 -0.9997 -0.9994  
## fBodyAccbandsEnergy25\_48.1 fBodyAccbandsEnergy1\_8.2  
## 1 -0.9998 -0.9936  
## 2 -0.9998 -0.9982  
## fBodyAccbandsEnergy9\_16.2 fBodyAccbandsEnergy17\_24.2  
## 1 -0.9995 -0.9997  
## 2 -0.9998 -0.9997  
## fBodyAccbandsEnergy25\_32.2 fBodyAccbandsEnergy33\_40.2  
## 1 -0.9996 -0.9993  
## 2 -0.9999 -0.9997  
## fBodyAccbandsEnergy41\_48.2 fBodyAccbandsEnergy49\_56.2  
## 1 -0.9979 -0.9959  
## 2 -0.9994 -0.9989  
## fBodyAccbandsEnergy57\_64.2 fBodyAccbandsEnergy1\_16.2  
## 1 -0.9951 -0.9947  
## 2 -0.9988 -0.9985  
## fBodyAccbandsEnergy17\_32.2 fBodyAccbandsEnergy33\_48.2  
## 1 -0.9997 -0.9989  
## 2 -0.9998 -0.9996  
## fBodyAccbandsEnergy49\_64.2 fBodyAccbandsEnergy1\_24.2  
## 1 -0.9957 -0.9949  
## 2 -0.9989 -0.9986  
## fBodyAccbandsEnergy25\_48.2 fBodyAccJerkmeanX fBodyAccJerkmeanY  
## 1 -0.9995 -0.9923 -0.9872  
## 2 -0.9998 -0.9950 -0.9813  
## fBodyAccJerkmeanZ fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ  
## 1 -0.9897 -0.9958 -0.9909 -0.9971  
## 2 -0.9897 -0.9967 -0.9821 -0.9926  
## fBodyAccJerkmadX fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX  
## 1 -0.9938 -0.9905 -0.9970 -0.9967  
## 2 -0.9950 -0.9829 -0.9916 -0.9974  
## fBodyAccJerkmaxY fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY  
## 1 -0.9920 -0.9932 -0.9983 -0.9911  
## 2 -0.9849 -0.9932 -0.9979 -0.9825  
## fBodyAccJerkminZ fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 1 -0.9599 -0.9905 -0.9999 -0.9998  
## 2 -0.9868 -0.9899 -1.0000 -0.9996  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY fBodyAccJerkiqrZ  
## 1 -0.9999 -0.9930 -0.9914 -0.9962  
## 2 -0.9998 -0.9928 -0.9852 -0.9910  
## fBodyAccJerkentropyX fBodyAccJerkentropyY fBodyAccJerkentropyZ  
## 1 -1 -1 -1  
## 2 -1 -1 -1  
## fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY fBodyAccJerkmaxIndsZ  
## 1 1.00 -0.24 -1.00  
## 2 -0.32 -0.12 -0.32  
## fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY fBodyAccJerkmeanFreqZ  
## 1 0.8704 0.21070 0.26371  
## 2 0.6085 -0.05368 0.06315  
## fBodyAccJerkskewnessX fBodyAccJerkkurtosisX fBodyAccJerkskewnessY  
## 1 -0.7037 -0.9037 -0.5826  
## 2 -0.6303 -0.9104 -0.4144  
## fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ fBodyAccJerkkurtosisZ  
## 1 -0.9363 -0.5073 -0.8055  
## 2 -0.8506 -0.6555 -0.9160  
## fBodyAccJerkbandsEnergy1\_8 fBodyAccJerkbandsEnergy9\_16  
## 1 -1 -1  
## 2 -1 -1  
## fBodyAccJerkbandsEnergy17\_24 fBodyAccJerkbandsEnergy25\_32  
## 1 -1.0000 -1  
## 2 -0.9999 -1  
## fBodyAccJerkbandsEnergy33\_40 fBodyAccJerkbandsEnergy41\_48  
## 1 -0.9999 -0.9996  
## 2 -0.9999 -0.9998  
## fBodyAccJerkbandsEnergy49\_56 fBodyAccJerkbandsEnergy57\_64  
## 1 -0.9995 -1  
## 2 -0.9999 -1  
## fBodyAccJerkbandsEnergy1\_16 fBodyAccJerkbandsEnergy17\_32  
## 1 -1 -1  
## 2 -1 -1  
## fBodyAccJerkbandsEnergy33\_48 fBodyAccJerkbandsEnergy49\_64  
## 1 -0.9998 -0.9995  
## 2 -0.9999 -0.9999  
## fBodyAccJerkbandsEnergy1\_24 fBodyAccJerkbandsEnergy25\_48  
## 1 -1 -0.9999  
## 2 -1 -0.9999  
## fBodyAccJerkbandsEnergy1\_8.1 fBodyAccJerkbandsEnergy9\_16.1  
## 1 -0.9999 -0.9999  
## 2 -0.9999 -0.9998  
## fBodyAccJerkbandsEnergy17\_24.1 fBodyAccJerkbandsEnergy25\_32.1  
## 1 -0.9998 -0.9999  
## 2 -0.9995 -0.9998  
## fBodyAccJerkbandsEnergy33\_40.1 fBodyAccJerkbandsEnergy41\_48.1  
## 1 -0.9997 -0.9997  
## 2 -0.9996 -0.9997  
## fBodyAccJerkbandsEnergy49\_56.1 fBodyAccJerkbandsEnergy57\_64.1  
## 1 -0.9996 -0.9998  
## 2 -0.9996 -0.9999  
## fBodyAccJerkbandsEnergy1\_16.1 fBodyAccJerkbandsEnergy17\_32.1  
## 1 -0.9999 -0.9998  
## 2 -0.9998 -0.9995  
## fBodyAccJerkbandsEnergy33\_48.1 fBodyAccJerkbandsEnergy49\_64.1  
## 1 -0.9997 -0.9996  
## 2 -0.9996 -0.9996  
## fBodyAccJerkbandsEnergy1\_24.1 fBodyAccJerkbandsEnergy25\_48.1  
## 1 -0.9999 -0.9998  
## 2 -0.9996 -0.9998  
## fBodyAccJerkbandsEnergy1\_8.2 fBodyAccJerkbandsEnergy9\_16.2  
## 1 -0.9994 -0.9998  
## 2 -0.9999 -0.9998  
## fBodyAccJerkbandsEnergy17\_24.2 fBodyAccJerkbandsEnergy25\_32.2  
## 1 -1.0000 -0.9999  
## 2 -0.9998 -0.9998  
## fBodyAccJerkbandsEnergy33\_40.2 fBodyAccJerkbandsEnergy41\_48.2  
## 1 -0.9998 -0.9998  
## 2 -0.9998 -0.9998  
## fBodyAccJerkbandsEnergy49\_56.2 fBodyAccJerkbandsEnergy57\_64.2  
## 1 -0.9988 -0.9986  
## 2 -0.9996 -1.0000  
## fBodyAccJerkbandsEnergy1\_16.2 fBodyAccJerkbandsEnergy17\_32.2  
## 1 -0.9996 -1.0000  
## 2 -0.9999 -0.9998  
## fBodyAccJerkbandsEnergy33\_48.2 fBodyAccJerkbandsEnergy49\_64.2  
## 1 -0.9998 -0.9987  
## 2 -0.9998 -0.9997  
## fBodyAccJerkbandsEnergy1\_24.2 fBodyAccJerkbandsEnergy25\_48.2  
## 1 -0.9998 -0.9999  
## 2 -0.9998 -0.9998  
## fBodyGyromeanX fBodyGyromeanY fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY  
## 1 -0.9866 -0.9818 -0.9895 -0.9850 -0.9739  
## 2 -0.9774 -0.9925 -0.9896 -0.9849 -0.9872  
## fBodyGyrostdZ fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX  
## 1 -0.9940 -0.9865 -0.9836 -0.9924 -0.9805  
## 2 -0.9898 -0.9794 -0.9918 -0.9880 -0.9874  
## fBodyGyromaxY fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ  
## 1 -0.9723 -0.9949 -0.9976 -0.9841 -0.9943  
## 2 -0.9848 -0.9902 -0.9869 -0.9991 -0.9944  
## fBodyGyrosma fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ  
## 1 -0.9853 -0.9999 -0.9997 -0.9999  
## 2 -0.9869 -0.9998 -0.9999 -0.9999  
## fBodyGyroiqrX fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX  
## 1 -0.9903 -0.9948 -0.9944 -0.7124  
## 2 -0.9871 -0.9956 -0.9873 -0.6111  
## fBodyGyroentropyY fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 1 -0.6448 -0.8390 -1 -1  
## 2 -0.7646 -0.7511 -1 -1  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 1 -1 -0.25755 0.09795  
## 2 -1 -0.04817 -0.40161  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 1 0.54715 0.3773 0.1341  
## 2 -0.06818 -0.4586 -0.7970  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 1 0.2734 -0.09126 -0.4843  
## 2 0.3876 0.14866 -0.1569  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 1 -0.7829 -0.9999 -0.9999  
## 2 -0.4518 -0.9999 -0.9998  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 1 -1.0000 -1.0000  
## 2 -0.9999 -0.9999  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 1 -0.9999 -1.0000  
## 2 -0.9999 -0.9999  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 1 -0.9999 -1.0000  
## 2 -0.9998 -0.9998  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 1 -0.9999 -1.0000  
## 2 -0.9998 -0.9999  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 1 -0.9999 -1.0000  
## 2 -0.9999 -0.9998  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 1 -0.9999 -1.0000  
## 2 -0.9998 -0.9999  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 1 -0.9995 -1  
## 2 -0.9999 -1  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 1 -1 -1  
## 2 -1 -1  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 1 -1 -0.9998  
## 2 -1 -1.0000  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 1 -0.9983 -0.999  
## 2 -1.0000 -1.000  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 1 -0.9996 -1  
## 2 -0.9999 -1  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 1 -0.9999 -0.9984  
## 2 -1.0000 -1.0000  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 1 -0.9996 -1  
## 2 -0.9999 -1  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 1 -1.0000 -1  
## 2 -0.9999 -1  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 1 -0.9999 -1  
## 2 -0.9999 -1  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 1 -0.9999 -0.9998  
## 2 -1.0000 -0.9999  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 1 -0.9991 -0.9999  
## 2 -1.0000 -1.0000  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 1 -1.0000 -0.9999  
## 2 -0.9999 -0.9999  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 1 -0.9999 -0.9994  
## 2 -1.0000 -1.0000  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2 fBodyAccMagmean  
## 1 -0.9999 -1 -0.9522  
## 2 -0.9999 -1 -0.9809  
## fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax fBodyAccMagmin  
## 1 -0.9561 -0.9489 -0.9743 -0.9257  
## 2 -0.9759 -0.9758 -0.9782 -0.9869  
## fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr fBodyAccMagentropy  
## 1 -0.9522 -0.9983 -0.9733 -0.6464  
## 2 -0.9809 -0.9995 -0.9845 -0.8167  
## fBodyAccMagmaxInds fBodyAccMagmeanFreq fBodyAccMagskewness  
## 1 -0.7931 -0.08844 -0.4365  
## 2 -1.0000 -0.04415 -0.1220  
## fBodyAccMagkurtosis fBodyBodyAccJerkMagmean fBodyBodyAccJerkMagstd  
## 1 -0.7968 -0.9937 -0.9938  
## 2 -0.4495 -0.9903 -0.9920  
## fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax fBodyBodyAccJerkMagmin  
## 1 -0.9920 -0.9934 -0.9882  
## 2 -0.9897 -0.9945 -0.9895  
## fBodyBodyAccJerkMagsma fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 1 -0.9937 -0.9999 -0.9914  
## 2 -0.9903 -0.9999 -0.9911  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 1 -1 -0.9365  
## 2 -1 -0.8413  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 1 0.3470 -0.5161  
## 2 0.5321 -0.6249  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 1 -0.8028 -0.9801 -0.9613  
## 2 -0.9002 -0.9883 -0.9833  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 1 -0.9737 -0.9523 -0.9895  
## 2 -0.9827 -0.9863 -0.9918  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 1 -0.9801 -0.9992 -0.9927  
## 2 -0.9883 -0.9998 -0.9940  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds fBodyBodyGyroMagmeanFreq  
## 1 -0.7013 -1.0000 -0.129  
## 2 -0.7207 -0.9487 -0.272  
## fBodyBodyGyroMagskewness fBodyBodyGyroMagkurtosis  
## 1 0.5862 0.3746  
## 2 -0.3363 -0.7200  
## fBodyBodyGyroJerkMagmean fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 1 -0.9920 -0.9907 -0.9899  
## 2 -0.9959 -0.9964 -0.9954  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin fBodyBodyGyroJerkMagsma  
## 1 -0.9924 -0.9910 -0.9920  
## 2 -0.9969 -0.9944 -0.9959  
## fBodyBodyGyroJerkMagenergy fBodyBodyGyroJerkMagiqr  
## 1 -0.9999 -0.9905  
## 2 -1.0000 -0.9945  
## fBodyBodyGyroJerkMagentropy fBodyBodyGyroJerkMagmaxInds  
## 1 -0.8713 -1  
## 2 -1.0000 -1  
## fBodyBodyGyroJerkMagmeanFreq fBodyBodyGyroJerkMagskewness  
## 1 -0.07432 -0.2987  
## 2 0.15807 -0.5951  
## fBodyBodyGyroJerkMagkurtosis angletBodyAccMean\_gravity  
## 1 -0.7103 -0.11275  
## 2 -0.8615 0.05348  
## angletBodyAccJerkMean\_gravityMean angletBodyGyroMean\_gravityMean  
## 1 0.030400 -0.4648  
## 2 -0.007435 -0.7326  
## angletBodyGyroJerkMean\_gravityMean angleX\_gravityMean angleY\_gravityMean  
## 1 -0.01845 -0.8412 0.1799  
## 2 0.70351 -0.8448 0.1803  
## angleZ\_gravityMean  
## 1 -0.05863  
## 2 -0.05432

tail(xData,n=2)

## tBodyAccmeanX tBodyAccmeanY tBodyAccmeanZ tBodyAccstdX tBodyAccstdY  
## 7351 0.2897 -0.01884 -0.1583 -0.2191 -0.11141  
## 7352 0.3515 -0.01242 -0.2039 -0.2693 -0.08721  
## tBodyAccstdZ tBodyAccmadX tBodyAccmadY tBodyAccmadZ tBodyAccmaxX  
## 7351 0.2689 -0.3105 -0.06820 0.3195 0.1017  
## 7352 0.1774 -0.3774 -0.03868 0.2294 0.2690  
## tBodyAccmaxY tBodyAccmaxZ tBodyAccminX tBodyAccminY tBodyAccminZ  
## 7351 -0.1495 0.05541 0.2348 0.2378 0.2647  
## 7352 -0.1470 -0.13375 0.2348 0.2378 0.3016  
## tBodyAccsma tBodyAccenergyX tBodyAccenergyY tBodyAccenergyZ  
## 7351 0.02001 -0.6939 -0.8469 -0.2797  
## 7352 -0.02796 -0.7306 -0.8385 -0.3683  
## tBodyAcciqrX tBodyAcciqrY tBodyAcciqrZ tBodyAccentropyX  
## 7351 -0.4882 -0.1962 0.2395 0.1603  
## 7352 -0.6271 -0.1123 0.2625 0.3122  
## tBodyAccentropyY tBodyAccentropyZ tBodyAccarCoeffX\_1  
## 7351 0.2466 0.02168 -0.4752  
## 7352 0.3335 -0.09910 -0.4429  
## tBodyAccarCoeffX\_2 tBodyAccarCoeffX\_3 tBodyAccarCoeffX\_4  
## 7351 0.2965 0.009588 -0.03835  
## 7352 0.3865 -0.230562 0.13928  
## tBodyAccarCoeffY\_1 tBodyAccarCoeffY\_2 tBodyAccarCoeffY\_3  
## 7351 -0.2778 0.2010 0.1018  
## 7352 -0.4464 0.3916 -0.1564  
## tBodyAccarCoeffY\_4 tBodyAccarCoeffZ\_1 tBodyAccarCoeffZ\_2  
## 7351 -0.10838 -0.4384 0.2508  
## 7352 0.09787 -0.4057 0.1833  
## tBodyAccarCoeffZ\_3 tBodyAccarCoeffZ\_4 tBodyAcccorrelationX\_Y  
## 7351 -0.23431 0.23244 -0.2578  
## 7352 -0.05656 0.05437 -0.2664  
## tBodyAcccorrelationX\_Z tBodyAcccorrelationY\_Z tGravityAccmeanX  
## 7351 -0.2311 -0.1899 0.9223  
## 7352 -0.2911 -0.2003 0.9187  
## tGravityAccmeanY tGravityAccmeanZ tGravityAccstdX tGravityAccstdY  
## 7351 -0.2332 -0.004984 -0.9741 -0.9724  
## 7352 -0.2333 -0.020954 -0.9524 -0.9678  
## tGravityAccstdZ tGravityAccmadX tGravityAccmadY tGravityAccmadZ  
## 7351 -0.8536 -0.9746 -0.9742 -0.8653  
## 7352 -0.8985 -0.9558 -0.9698 -0.9033  
## tGravityAccmaxX tGravityAccmaxY tGravityAccmaxZ tGravityAccminX  
## 7351 0.856 -0.2443 0.024684 0.9330  
## 7352 0.856 -0.2410 0.003031 0.9167  
## tGravityAccminY tGravityAccminZ tGravityAccsma tGravityAccenergyX  
## 7351 -0.2105 -0.04001 -0.440 0.7925  
## 7352 -0.2121 -0.04749 -0.432 0.7833  
## tGravityAccenergyY tGravityAccenergyZ tGravityAcciqrX tGravityAcciqrY  
## 7351 -0.9106 -0.9988 -0.9742 -0.9787  
## 7352 -0.9106 -0.9981 -0.9641 -0.9705  
## tGravityAcciqrZ tGravityAccentropyX tGravityAccentropyY  
## 7351 -0.8906 -0.4026 -1  
## 7352 -0.9200 -0.2330 -1  
## tGravityAccentropyZ tGravityAccarCoeffX\_1 tGravityAccarCoeffX\_2  
## 7351 -0.4926 -0.6288 0.6662  
## 7352 -0.9440 -0.6130 0.6525  
## tGravityAccarCoeffX\_3 tGravityAccarCoeffX\_4 tGravityAccarCoeffY\_1  
## 7351 -0.7025 0.7378 -0.4184  
## 7352 -0.6910 0.7285 -0.4997  
## tGravityAccarCoeffY\_2 tGravityAccarCoeffY\_3 tGravityAccarCoeffY\_4  
## 7351 0.4040 -0.4273 0.4652  
## 7352 0.4817 -0.4963 0.5240  
## tGravityAccarCoeffZ\_1 tGravityAccarCoeffZ\_2 tGravityAccarCoeffZ\_3  
## 7351 -0.8386 0.8586 -0.8782  
## 7352 -0.8420 0.8615 -0.8805  
## tGravityAccarCoeffZ\_4 tGravityAcccorrelationX\_Y  
## 7351 0.8940 0.7585  
## 7352 0.8956 0.2528  
## tGravityAcccorrelationX\_Z tGravityAcccorrelationY\_Z tBodyAccJerkmeanX  
## 7351 -0.5066 -0.1604 -0.02585  
## 7352 -0.1231 0.2952 0.07505  
## tBodyAccJerkmeanY tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY  
## 7351 -0.02582 -0.03268 -0.3871 -0.4061  
## 7352 0.01140 -0.28568 -0.3205 -0.4694  
## tBodyAccJerkstdZ tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ  
## 7351 -0.6679 -0.3982 -0.3960 -0.6447  
## 7352 -0.7127 -0.4135 -0.4477 -0.6804  
## tBodyAccJerkmaxX tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX  
## 7351 -0.3269 -0.5993 -0.7643 0.28420  
## 7352 -0.1284 -0.5993 -0.7689 0.02911  
## tBodyAccJerkminY tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX  
## 7351 0.4625 0.6214 -0.4507 -0.8096  
## 7352 0.4625 0.7275 -0.4845 -0.7665  
## tBodyAccJerkenergyY tBodyAccJerkenergyZ tBodyAccJerkiqrX  
## 7351 -0.8196 -0.9408 -0.3644  
## 7352 -0.8555 -0.9550 -0.4606  
## tBodyAccJerkiqrY tBodyAccJerkiqrZ tBodyAccJerkentropyX  
## 7351 -0.5357 -0.6194 0.5861  
## 7352 -0.5390 -0.6152 0.5245  
## tBodyAccJerkentropyY tBodyAccJerkentropyZ tBodyAccJerkarCoeffX\_1  
## 7351 0.5018 0.3798 -0.3850  
## 7352 0.5054 0.3223 -0.3937  
## tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3 tBodyAccJerkarCoeffX\_4  
## 7351 0.08415 0.16582 -0.086137  
## 7352 0.29545 -0.04137 -0.003617  
## tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2 tBodyAccJerkarCoeffY\_3  
## 7351 -0.2764 0.1189 0.18016  
## 7352 -0.4721 0.3221 -0.07749  
## tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1 tBodyAccJerkarCoeffZ\_2  
## 7351 0.1753 -0.4399 0.02425  
## 7352 0.1565 -0.3426 -0.11233  
## tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 7351 -0.33208 -0.1173  
## 7352 -0.05067 -0.3487  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 7351 -0.5517 -0.02003  
## 7352 -0.4205 -0.16630  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY  
## 7351 0.2636 -0.40620 0.0688  
## 7352 0.1664 -0.04181 -0.3225  
## tBodyGyromeanZ tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ  
## 7351 0.17747 -0.5292 0.19036 -0.2879  
## 7352 0.03825 -0.4512 0.02222 -0.2201  
## tBodyGyromadX tBodyGyromadY tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY  
## 7351 -0.5278 0.17894 -0.3332 -0.6857 -0.1687  
## 7352 -0.4828 -0.07368 -0.2361 -0.4136 -0.2211  
## tBodyGyromaxZ tBodyGyrominX tBodyGyrominY tBodyGyrominZ tBodyGyrosma  
## 7351 -0.1763 0.3429 0.4735 0.2947 0.02338  
## 7352 -0.2623 0.3904 0.4526 0.2774 -0.08496  
## tBodyGyroenergyX tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX  
## 7351 -0.8068 -0.2985 -0.7615 -0.5200  
## 7352 -0.8623 -0.4743 -0.7172 -0.5153  
## tBodyGyroiqrY tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY  
## 7351 0.04252 -0.5383 -0.60510 -0.3836  
## 7352 -0.37096 -0.3479 0.08656 -0.4272  
## tBodyGyroentropyZ tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2  
## 7351 0.5417 -0.2706 0.1057  
## 7352 0.3879 -0.3117 0.1157  
## tBodyGyroarCoeffX\_3 tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1  
## 7351 0.2618 -0.2572 -0.804  
## 7352 0.2851 -0.2462 -0.715  
## tBodyGyroarCoeffY\_2 tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4  
## 7351 0.7679 -0.7799 0.5928  
## 7352 0.6726 -0.6948 0.5627  
## tBodyGyroarCoeffZ\_1 tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3  
## 7351 -0.7043 0.7162 -0.6883  
## 7352 -0.7209 0.6442 -0.4970  
## tBodyGyroarCoeffZ\_4 tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z  
## 7351 0.5532 -0.6629 -0.6075  
## 7352 0.4129 -0.3479 -0.3251  
## tBodyGyrocorrelationY\_Z tBodyGyroJerkmeanX tBodyGyroJerkmeanY  
## 7351 0.3768 -0.07992 -0.05815  
## 7352 0.1889 0.26305 0.09567  
## tBodyGyroJerkmeanZ tBodyGyroJerkstdX tBodyGyroJerkstdY  
## 7351 -0.07122 -0.6576 -0.6597  
## 7352 -0.21579 -0.6955 -0.6923  
## tBodyGyroJerkstdZ tBodyGyroJerkmadX tBodyGyroJerkmadY  
## 7351 -0.6020 -0.6455 -0.6738  
## 7352 -0.6119 -0.6888 -0.7028  
## tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 7351 -0.6011 -0.6632 -0.6565  
## 7352 -0.5983 -0.7503 -0.7785  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY  
## 7351 -0.6231 0.7165 0.7846  
## 7352 -0.6978 0.8006 0.7808  
## tBodyGyroJerkminZ tBodyGyroJerksma tBodyGyroJerkenergyX  
## 7351 0.6997 -0.6489 -0.9403  
## 7352 0.6917 -0.6744 -0.9519  
## tBodyGyroJerkenergyY tBodyGyroJerkenergyZ tBodyGyroJerkiqrX  
## 7351 -0.9414 -0.9190 -0.6205  
## 7352 -0.9520 -0.9228 -0.6699  
## tBodyGyroJerkiqrY tBodyGyroJerkiqrZ tBodyGyroJerkentropyX  
## 7351 -0.7146 -0.6307 0.4082  
## 7352 -0.7117 -0.6169 0.6605  
## tBodyGyroJerkentropyY tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1  
## 7351 0.4022 0.6646 -0.0587  
## 7352 0.4499 0.6338 -0.1052  
## tBodyGyroJerkarCoeffX\_2 tBodyGyroJerkarCoeffX\_3  
## 7351 -0.06570 0.2820  
## 7352 -0.09082 0.2369  
## tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 7351 0.03525 -0.782  
## 7352 0.08944 -0.627  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3  
## 7351 0.6492 -0.4903  
## 7352 0.4426 -0.1922  
## tBodyGyroJerkarCoeffY\_4 tBodyGyroJerkarCoeffZ\_1  
## 7351 0.03005 -0.6801  
## 7352 -0.35034 -0.7260  
## tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 7351 0.5326 -0.2866  
## 7352 0.4463 -0.2916  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 7351 -0.21120 -0.05249  
## 7352 -0.07467 0.05288  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z  
## 7351 0.01824 -0.1285  
## 7352 -0.23067 -0.2260  
## tBodyAccMagmean tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax  
## 7351 -0.002445 -0.1857 -0.3007 -0.09805  
## 7352 -0.049090 -0.2292 -0.3457 -0.05191  
## tBodyAccMagmin tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr  
## 7351 -0.4717 -0.002445 -0.4964 -0.5166  
## 7352 -0.6255 -0.049090 -0.5429 -0.5177  
## tBodyAccMagentropy tBodyAccMagarCoeff1 tBodyAccMagarCoeff2  
## 7351 0.7794 -0.5262 0.4506  
## 7352 0.7535 -0.3929 0.3898  
## tBodyAccMagarCoeff3 tBodyAccMagarCoeff4 tGravityAccMagmean  
## 7351 -0.4788 0.4214 -0.002445  
## 7352 -0.5743 0.4996 -0.049090  
## tGravityAccMagstd tGravityAccMagmad tGravityAccMagmax  
## 7351 -0.1857 -0.3007 -0.09805  
## 7352 -0.2292 -0.3457 -0.05191  
## tGravityAccMagmin tGravityAccMagsma tGravityAccMagenergy  
## 7351 -0.4717 -0.002445 -0.4964  
## 7352 -0.6255 -0.049090 -0.5429  
## tGravityAccMagiqr tGravityAccMagentropy tGravityAccMagarCoeff1  
## 7351 -0.5166 0.7794 -0.5262  
## 7352 -0.5177 0.7535 -0.3929  
## tGravityAccMagarCoeff2 tGravityAccMagarCoeff3 tGravityAccMagarCoeff4  
## 7351 0.4506 -0.4788 0.4214  
## 7352 0.3898 -0.5743 0.4996  
## tBodyAccJerkMagmean tBodyAccJerkMagstd tBodyAccJerkMagmad  
## 7351 -0.4449 -0.4188 -0.4811  
## 7352 -0.4758 -0.3133 -0.4376  
## tBodyAccJerkMagmax tBodyAccJerkMagmin tBodyAccJerkMagsma  
## 7351 -0.3362 -0.4703 -0.4449  
## 7352 -0.2761 -0.6516 -0.4758  
## tBodyAccJerkMagenergy tBodyAccJerkMagiqr tBodyAccJerkMagentropy  
## 7351 -0.8326 -0.5981 0.5846  
## 7352 -0.8256 -0.6018 0.5895  
## tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 7351 -0.3138 0.5522  
## 7352 -0.4480 0.4821  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 7351 -0.3295 -0.1048 0.02874  
## 7352 -0.4014 0.3781 -0.10037  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 7351 -0.01231 0.02437 -0.1461 -0.4116  
## 7352 -0.09570 -0.02375 -0.1868 -0.7206  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr  
## 7351 0.02874 -0.4237 -0.1923  
## 7352 -0.10037 -0.5496 -0.1049  
## tBodyGyroMagentropy tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2  
## 7351 0.2301 -0.7203 0.7469  
## 7352 0.4484 -0.7045 0.7368  
## tBodyGyroMagarCoeff3 tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean  
## 7351 -0.6909 0.4537 -0.6418  
## 7352 -0.7386 0.5414 -0.6716  
## tBodyGyroJerkMagstd tBodyGyroJerkMagmad tBodyGyroJerkMagmax  
## 7351 -0.6927 -0.7144 -0.6755  
## 7352 -0.7199 -0.7400 -0.7652  
## tBodyGyroJerkMagmin tBodyGyroJerkMagsma tBodyGyroJerkMagenergy  
## 7351 -0.7048 -0.6418 -0.9379  
## 7352 -0.7048 -0.6716 -0.9479  
## tBodyGyroJerkMagiqr tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 7351 -0.7556 0.7160 -0.004562  
## 7352 -0.7864 0.7563 0.035308  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 7351 0.11169 -0.3375  
## 7352 -0.02188 -0.0244  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 7351 -0.001105 -0.4004 -0.3069 -0.3538  
## 7352 -0.175386 -0.2653 -0.2204 -0.2728  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 7351 -0.1582 -0.07761 0.4299 -0.2470 -0.24593  
## 7352 -0.2708 -0.08011 0.2894 -0.1145 -0.08815  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 7351 -0.04318 -0.1474 -0.2622 0.7069 -0.9274  
## 7352 -0.01519 -0.4176 -0.2762 0.4497 -0.9168  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 7351 -0.9640 -0.9828 -0.2655 -0.6931 -0.6002  
## 7352 -0.9718 -0.8364 -0.1426 -0.7310 -0.5784  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ  
## 7351 -0.1873 -0.7085 -0.5489 -0.7734  
## 7352 -0.2988 -0.2515 -0.4097 -0.7117  
## fBodyAccentropyX fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX  
## 7351 0.4025 0.3274 0.2101 -0.8065  
## 7352 0.5889 0.4531 0.2277 -0.8065  
## fBodyAccmaxIndsY fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY  
## 7351 -0.8000 -0.9231 -0.4690 -0.2003  
## 7352 -0.9333 -0.9231 -0.5661 -0.4224  
## fBodyAccmeanFreqZ fBodyAccskewnessX fBodyAcckurtosisX  
## 7351 -0.7015 0.3828 0.1277  
## 7352 -0.5864 -0.2436 -0.6330  
## fBodyAccskewnessY fBodyAcckurtosisY fBodyAccskewnessZ  
## 7351 -0.03578 -0.4508 0.4848  
## 7352 -0.24685 -0.6064 0.2283  
## fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8 fBodyAccbandsEnergy9\_16  
## 7351 0.28662 -0.6434 -0.8707  
## 7352 -0.04095 -0.7095 -0.8657  
## fBodyAccbandsEnergy17\_24 fBodyAccbandsEnergy25\_32  
## 7351 -0.7880 -0.9446  
## 7352 -0.7133 -0.8296  
## fBodyAccbandsEnergy33\_40 fBodyAccbandsEnergy41\_48  
## 7351 -0.9429 -0.8951  
## 7352 -0.9129 -0.9052  
## fBodyAccbandsEnergy49\_56 fBodyAccbandsEnergy57\_64  
## 7351 -0.9714 -0.988  
## 7352 -0.9685 -0.999  
## fBodyAccbandsEnergy1\_16 fBodyAccbandsEnergy17\_32  
## 7351 -0.6772 -0.8015  
## 7352 -0.7285 -0.7032  
## fBodyAccbandsEnergy33\_48 fBodyAccbandsEnergy49\_64  
## 7351 -0.925 -0.9769  
## 7352 -0.910 -0.9787  
## fBodyAccbandsEnergy1\_24 fBodyAccbandsEnergy25\_48  
## 7351 -0.6851 -0.9244  
## 7352 -0.7274 -0.8351  
## fBodyAccbandsEnergy1\_8.1 fBodyAccbandsEnergy9\_16.1  
## 7351 -0.5223 -0.9054  
## 7352 -0.4738 -0.9111  
## fBodyAccbandsEnergy17\_24.1 fBodyAccbandsEnergy25\_32.1  
## 7351 -0.8659 -0.9218  
## 7352 -0.9142 -0.9178  
## fBodyAccbandsEnergy33\_40.1 fBodyAccbandsEnergy41\_48.1  
## 7351 -0.9112 -0.9148  
## 7352 -0.9198 -0.9623  
## fBodyAccbandsEnergy49\_56.1 fBodyAccbandsEnergy57\_64.1  
## 7351 -0.9395 -0.9996  
## 7352 -0.9621 -0.9997  
## fBodyAccbandsEnergy1\_16.1 fBodyAccbandsEnergy17\_32.1  
## 7351 -0.5853 -0.8479  
## 7352 -0.5511 -0.8934  
## fBodyAccbandsEnergy33\_48.1 fBodyAccbandsEnergy49\_64.1  
## 7351 -0.9024 -0.9629  
## 7352 -0.9270 -0.9767  
## fBodyAccbandsEnergy1\_24.1 fBodyAccbandsEnergy25\_48.1  
## 7351 -0.5974 -0.9118  
## 7352 -0.5746 -0.9165  
## fBodyAccbandsEnergy1\_8.2 fBodyAccbandsEnergy9\_16.2  
## 7351 0.04051 -0.9377  
## 7352 -0.10677 -0.9397  
## fBodyAccbandsEnergy17\_24.2 fBodyAccbandsEnergy25\_32.2  
## 7351 -0.9737 -0.9780  
## 7352 -0.9743 -0.9792  
## fBodyAccbandsEnergy33\_40.2 fBodyAccbandsEnergy41\_48.2  
## 7351 -0.9850 -0.9525  
## 7352 -0.9934 -0.9451  
## fBodyAccbandsEnergy49\_56.2 fBodyAccbandsEnergy57\_64.2  
## 7351 -0.9739 -0.9960  
## 7352 -0.9053 -0.8637  
## fBodyAccbandsEnergy1\_16.2 fBodyAccbandsEnergy17\_32.2  
## 7351 -0.1481 -0.9753  
## 7352 -0.2665 -0.9761  
## fBodyAccbandsEnergy33\_48.2 fBodyAccbandsEnergy49\_64.2  
## 7351 -0.9756 -0.9804  
## 7352 -0.9804 -0.8920  
## fBodyAccbandsEnergy1\_24.2 fBodyAccbandsEnergy25\_48.2  
## 7351 -0.1731 -0.9773  
## 7352 -0.2874 -0.9795  
## fBodyAccJerkmeanX fBodyAccJerkmeanY fBodyAccJerkmeanZ  
## 7351 -0.4701 -0.4583 -0.6710  
## 7352 -0.3568 -0.4827 -0.6849  
## fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ fBodyAccJerkmadX  
## 7351 -0.3579 -0.3879 -0.6636 -0.2942  
## 7352 -0.3425 -0.4912 -0.7386 -0.1848  
## fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX fBodyAccJerkmaxY  
## 7351 -0.4379 -0.6565 -0.4981 -0.5429  
## 7352 -0.4609 -0.7194 -0.4781 -0.6406  
## fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY fBodyAccJerkminZ  
## 7351 -0.6963 -0.9610 -0.8327 -0.8860  
## 7352 -0.7719 -0.8064 -0.9100 -0.9416  
## fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 7351 -0.4486 -0.8093 -0.8196  
## 7352 -0.4091 -0.7661 -0.8555  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY  
## 7351 -0.9408 -0.5399 -0.6405  
## 7352 -0.9551 -0.2350 -0.5187  
## fBodyAccJerkiqrZ fBodyAccJerkentropyX fBodyAccJerkentropyY  
## 7351 -0.7154 0.4175 0.3470  
## 7352 -0.7402 0.5518 0.3409  
## fBodyAccJerkentropyZ fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY  
## 7351 0.11398 -0.88 -0.4  
## 7352 0.07531 -0.32 -0.4  
## fBodyAccJerkmaxIndsZ fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY  
## 7351 -0.96 -0.3364 -0.3641  
## 7352 -0.96 -0.3156 -0.6338  
## fBodyAccJerkmeanFreqZ fBodyAccJerkskewnessX fBodyAccJerkkurtosisX  
## 7351 -0.5984 -0.04227 -0.6107  
## 7352 -0.6638 -0.27613 -0.7396  
## fBodyAccJerkskewnessY fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ  
## 7351 -0.2434 -0.7801 -0.2555  
## 7352 -0.5093 -0.9135 -0.4381  
## fBodyAccJerkkurtosisZ fBodyAccJerkbandsEnergy1\_8  
## 7351 -0.7276 -0.8229  
## 7352 -0.8037 -0.8342  
## fBodyAccJerkbandsEnergy9\_16 fBodyAccJerkbandsEnergy17\_24  
## 7351 -0.8444 -0.8017  
## 7352 -0.8439 -0.7356  
## fBodyAccJerkbandsEnergy25\_32 fBodyAccJerkbandsEnergy33\_40  
## 7351 -0.9475 -0.9481  
## 7352 -0.8155 -0.8999  
## fBodyAccJerkbandsEnergy41\_48 fBodyAccJerkbandsEnergy49\_56  
## 7351 -0.8611 -0.9582  
## 7352 -0.8638 -0.9450  
## fBodyAccJerkbandsEnergy57\_64 fBodyAccJerkbandsEnergy1\_16  
## 7351 -0.9995 -0.8211  
## 7352 -0.9946 -0.8258  
## fBodyAccJerkbandsEnergy17\_32 fBodyAccJerkbandsEnergy33\_48  
## 7351 -0.8196 -0.9080  
## 7352 -0.7090 -0.8767  
## fBodyAccJerkbandsEnergy49\_64 fBodyAccJerkbandsEnergy1\_24  
## 7351 -0.9588 -0.7808  
## 7352 -0.9449 -0.7591  
## fBodyAccJerkbandsEnergy25\_48 fBodyAccJerkbandsEnergy1\_8.1  
## 7351 -0.8994 -0.6894  
## 7352 -0.7809 -0.7008  
## fBodyAccJerkbandsEnergy9\_16.1 fBodyAccJerkbandsEnergy17\_24.1  
## 7351 -0.8851 -0.8357  
## 7352 -0.9059 -0.8975  
## fBodyAccJerkbandsEnergy25\_32.1 fBodyAccJerkbandsEnergy33\_40.1  
## 7351 -0.917 -0.9144  
## 7352 -0.915 -0.9239  
## fBodyAccJerkbandsEnergy41\_48.1 fBodyAccJerkbandsEnergy49\_56.1  
## 7351 -0.8914 -0.9278  
## 7352 -0.9510 -0.9554  
## fBodyAccJerkbandsEnergy57\_64.1 fBodyAccJerkbandsEnergy1\_16.1  
## 7351 -0.9947 -0.8227  
## 7352 -0.9980 -0.8442  
## fBodyAccJerkbandsEnergy17\_32.1 fBodyAccJerkbandsEnergy33\_48.1  
## 7351 -0.8410 -0.8840  
## 7352 -0.8852 -0.9172  
## fBodyAccJerkbandsEnergy49\_64.1 fBodyAccJerkbandsEnergy1\_24.1  
## 7351 -0.9363 -0.7987  
## 7352 -0.9607 -0.8416  
## fBodyAccJerkbandsEnergy25\_48.1 fBodyAccJerkbandsEnergy1\_8.2  
## 7351 -0.9032 -0.6529  
## 7352 -0.9147 -0.7726  
## fBodyAccJerkbandsEnergy9\_16.2 fBodyAccJerkbandsEnergy17\_24.2  
## 7351 -0.9367 -0.9741  
## 7352 -0.9496 -0.9760  
## fBodyAccJerkbandsEnergy25\_32.2 fBodyAccJerkbandsEnergy33\_40.2  
## 7351 -0.9772 -0.9847  
## 7352 -0.9789 -0.9935  
## fBodyAccJerkbandsEnergy41\_48.2 fBodyAccJerkbandsEnergy49\_56.2  
## 7351 -0.9487 -0.9579  
## 7352 -0.9526 -0.9726  
## fBodyAccJerkbandsEnergy57\_64.2 fBodyAccJerkbandsEnergy1\_16.2  
## 7351 -0.9964 -0.8226  
## 7352 -0.9982 -0.8762  
## fBodyAccJerkbandsEnergy17\_32.2 fBodyAccJerkbandsEnergy33\_48.2  
## 7351 -0.9756 -0.9728  
## 7352 -0.9775 -0.9807  
## fBodyAccJerkbandsEnergy49\_64.2 fBodyAccJerkbandsEnergy1\_24.2  
## 7351 -0.9597 -0.9036  
## 7352 -0.9738 -0.9287  
## fBodyAccJerkbandsEnergy25\_48.2 fBodyGyromeanX fBodyGyromeanY  
## 7351 -0.9755 -0.5621 -0.3753  
## 7352 -0.9796 -0.3472 -0.2875  
## fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY fBodyGyrostdZ  
## 7351 -0.4112 -0.5276 0.4241 -0.3169  
## 7352 -0.3089 -0.4848 0.1664 -0.2643  
## fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX fBodyGyromaxY  
## 7351 -0.5368 -0.1705 -0.2998 -0.3878 0.54607  
## 7352 -0.4257 -0.1202 -0.2125 -0.3991 0.07596  
## fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ fBodyGyrosma  
## 7351 -0.505 -0.9750 -0.9684 -0.9222 -0.4119  
## 7352 -0.458 -0.8929 -0.6474 -0.8421 -0.2682  
## fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ fBodyGyroiqrX  
## 7351 -0.8885 -0.2903 -0.7444 -0.6510  
## 7352 -0.8486 -0.4762 -0.6937 -0.7046  
## fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX fBodyGyroentropyY  
## 7351 -0.7176 -0.4964 0.4043 0.4458  
## 7352 -0.6300 -0.5991 0.4788 0.4667  
## fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 7351 0.3095 -0.9333 -0.9355  
## 7352 0.3583 -1.0000 -0.9355  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 7351 -0.7931 -0.362980 -0.7935  
## 7352 -0.7931 0.002108 -0.7381  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 7351 -0.4744 0.5111 0.3543  
## 7352 -0.3472 0.1025 -0.2024  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 7351 0.53374 0.2975 -0.04065  
## 7352 0.03746 -0.3716 -0.06954  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 7351 -0.4548 -0.8906 -0.9541  
## 7352 -0.4833 -0.8568 -0.9200  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 7351 -0.9372 -0.9841  
## 7352 -0.9205 -0.9543  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 7351 -0.9648 -0.9783  
## 7352 -0.8698 -0.8620  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 7351 -0.9768 -0.9997  
## 7352 -0.8137 -0.7902  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 7351 -0.8903 -0.9430  
## 7352 -0.8535 -0.9174  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 7351 -0.9668 -0.9869  
## 7352 -0.8535 -0.8033  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 7351 -0.8888 -0.9789  
## 7352 -0.8517 -0.9247  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 7351 0.1936 -0.9375  
## 7352 -0.1293 -0.9554  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 7351 -0.9877 -0.9807  
## 7352 -0.9789 -0.9802  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 7351 -0.9936 -0.9883  
## 7352 -0.9890 -0.9825  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 7351 -0.9945 -0.9998  
## 7352 -0.9715 -0.9760  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 7351 -0.1556 -0.9827  
## 7352 -0.3847 -0.9743  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 7351 -0.9925 -0.9960  
## 7352 -0.9875 -0.9696  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 7351 -0.2103 -0.9829  
## 7352 -0.4187 -0.9810  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 7351 -0.7613 -0.9364  
## 7352 -0.7099 -0.9314  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 7351 -0.9500 -0.9767  
## 7352 -0.9538 -0.9757  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 7351 -0.9904 -0.9907  
## 7352 -0.9769 -0.9586  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 7351 -0.9909 -0.9982  
## 7352 -0.9370 -0.9371  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 7351 -0.7516 -0.9410  
## 7352 -0.7010 -0.9442  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 7351 -0.9904 -0.9941  
## 7352 -0.9719 -0.9370  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2  
## 7351 -0.7460 -0.9810  
## 7352 -0.6962 -0.9745  
## fBodyAccMagmean fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax  
## 7351 -0.3468 -0.2345 -0.2204 -0.3977  
## 7352 -0.2400 -0.3427 -0.1466 -0.6200  
## fBodyAccMagmin fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr  
## 7351 -0.9028 -0.3468 -0.6636 -0.5333  
## 7352 -0.9286 -0.2400 -0.6981 -0.2160  
## fBodyAccMagentropy fBodyAccMagmaxInds fBodyAccMagmeanFreq  
## 7351 0.3906 -0.7931 -0.2328  
## 7352 0.5741 -0.9310 -0.2150  
## fBodyAccMagskewness fBodyAccMagkurtosis fBodyBodyAccJerkMagmean  
## 7351 -0.09348 -0.4634 -0.4552  
## 7352 -0.57276 -0.8616 -0.3380  
## fBodyBodyAccJerkMagstd fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax  
## 7351 -0.3781 -0.3369 -0.4238  
## 7352 -0.2872 -0.1911 -0.5499  
## fBodyBodyAccJerkMagmin fBodyBodyAccJerkMagsma  
## 7351 -0.6948 -0.4552  
## 7352 -0.8377 -0.3380  
## fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 7351 -0.8263 -0.5598  
## 7352 -0.7591 -0.4347  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 7351 0.2406 -0.9048  
## 7352 0.2987 -0.9048  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 7351 -0.1099 0.03817  
## 7352 -0.2424 -0.32195  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 7351 -0.3056 -0.4150 0.0392  
## 7352 -0.7685 -0.3308 -0.1060  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 7351 -0.1711 0.11599 -0.9593  
## 7352 -0.1065 -0.09054 -0.7792  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 7351 -0.4150 -0.5105 -0.5132  
## 7352 -0.3308 -0.5894 -0.2906  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds  
## 7351 0.4452 -0.8462  
## 7352 0.4365 -0.8462  
## fBodyBodyGyroMagmeanFreq fBodyBodyGyroMagskewness  
## 7351 -0.4123 0.30811  
## 7352 -0.3891 -0.05758  
## fBodyBodyGyroMagkurtosis fBodyBodyGyroJerkMagmean  
## 7351 -0.0425 -0.7121  
## 7352 -0.3880 -0.7156  
## fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 7351 -0.6894 -0.7022  
## 7352 -0.7451 -0.6974  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin  
## 7351 -0.6948 -0.8862  
## 7352 -0.7836 -0.7587  
## fBodyBodyGyroJerkMagsma fBodyBodyGyroJerkMagenergy  
## 7351 -0.7121 -0.952  
## 7352 -0.7156 -0.960  
## fBodyBodyGyroJerkMagiqr fBodyBodyGyroJerkMagentropy  
## 7351 -0.7600 0.2101  
## 7352 -0.6772 0.2020  
## fBodyBodyGyroJerkMagmaxInds fBodyBodyGyroJerkMagmeanFreq  
## 7351 -0.9048 0.01387  
## 7352 -0.9048 -0.05840  
## fBodyBodyGyroJerkMagskewness fBodyBodyGyroJerkMagkurtosis  
## 7351 0.06391 -0.3443  
## 7352 -0.38705 -0.7407  
## angletBodyAccMean\_gravity angletBodyAccJerkMean\_gravityMean  
## 7351 -0.1014 0.700740  
## 7352 -0.2801 -0.007739  
## angletBodyGyroMean\_gravityMean angletBodyGyroJerkMean\_gravityMean  
## 7351 0.93667 -0.5895  
## 7352 -0.05609 -0.6170  
## angleX\_gravityMean angleY\_gravityMean angleZ\_gravityMean  
## 7351 -0.7852 0.2464 0.02534  
## 7352 -0.7833 0.2468 0.03669

# Add 3 columns: subjectID, subjectType, activity to dataTest  
xData$subjecttype <- testOrTrain  
xData <- cbind(subjectData$subjectid,  
 xData$subjecttype,  
 activityData$activity,   
 xData[,1:561])  
  
# Rename these two new columns' names to subjectID and activity  
names(xData)[names(xData)=="subjectData$subjectid"] <- "subjectid"  
names(xData)[names(xData)=="xData$subjecttype"] <- "subjecttype"  
names(xData)[names(xData)=="activityData$activity"] <- "activity"  
print("New column names:")

## [1] "New column names:"

print(names(xData)[1]);print(names(xData)[2]);print(names(xData)[3])

## [1] "subjectid"

## [1] "subjecttype"

## [1] "activity"

print(tail(xData,n=1))

## subjectid subjecttype activity tBodyAccmeanX tBodyAccmeanY  
## 7352 30 train WALKING\_UPSTAIRS 0.3515 -0.01242  
## tBodyAccmeanZ tBodyAccstdX tBodyAccstdY tBodyAccstdZ tBodyAccmadX  
## 7352 -0.2039 -0.2693 -0.08721 0.1774 -0.3774  
## tBodyAccmadY tBodyAccmadZ tBodyAccmaxX tBodyAccmaxY tBodyAccmaxZ  
## 7352 -0.03868 0.2294 0.269 -0.147 -0.1337  
## tBodyAccminX tBodyAccminY tBodyAccminZ tBodyAccsma tBodyAccenergyX  
## 7352 0.2348 0.2378 0.3016 -0.02796 -0.7306  
## tBodyAccenergyY tBodyAccenergyZ tBodyAcciqrX tBodyAcciqrY  
## 7352 -0.8385 -0.3683 -0.6271 -0.1123  
## tBodyAcciqrZ tBodyAccentropyX tBodyAccentropyY tBodyAccentropyZ  
## 7352 0.2625 0.3122 0.3335 -0.0991  
## tBodyAccarCoeffX\_1 tBodyAccarCoeffX\_2 tBodyAccarCoeffX\_3  
## 7352 -0.4429 0.3865 -0.2306  
## tBodyAccarCoeffX\_4 tBodyAccarCoeffY\_1 tBodyAccarCoeffY\_2  
## 7352 0.1393 -0.4464 0.3916  
## tBodyAccarCoeffY\_3 tBodyAccarCoeffY\_4 tBodyAccarCoeffZ\_1  
## 7352 -0.1564 0.09787 -0.4057  
## tBodyAccarCoeffZ\_2 tBodyAccarCoeffZ\_3 tBodyAccarCoeffZ\_4  
## 7352 0.1833 -0.05656 0.05437  
## tBodyAcccorrelationX\_Y tBodyAcccorrelationX\_Z tBodyAcccorrelationY\_Z  
## 7352 -0.2664 -0.2911 -0.2003  
## tGravityAccmeanX tGravityAccmeanY tGravityAccmeanZ tGravityAccstdX  
## 7352 0.9187 -0.2333 -0.02095 -0.9524  
## tGravityAccstdY tGravityAccstdZ tGravityAccmadX tGravityAccmadY  
## 7352 -0.9678 -0.8985 -0.9558 -0.9698  
## tGravityAccmadZ tGravityAccmaxX tGravityAccmaxY tGravityAccmaxZ  
## 7352 -0.9033 0.856 -0.241 0.003031  
## tGravityAccminX tGravityAccminY tGravityAccminZ tGravityAccsma  
## 7352 0.9167 -0.2121 -0.04749 -0.432  
## tGravityAccenergyX tGravityAccenergyY tGravityAccenergyZ  
## 7352 0.7833 -0.9106 -0.9981  
## tGravityAcciqrX tGravityAcciqrY tGravityAcciqrZ tGravityAccentropyX  
## 7352 -0.9641 -0.9705 -0.92 -0.233  
## tGravityAccentropyY tGravityAccentropyZ tGravityAccarCoeffX\_1  
## 7352 -1 -0.944 -0.613  
## tGravityAccarCoeffX\_2 tGravityAccarCoeffX\_3 tGravityAccarCoeffX\_4  
## 7352 0.6525 -0.691 0.7285  
## tGravityAccarCoeffY\_1 tGravityAccarCoeffY\_2 tGravityAccarCoeffY\_3  
## 7352 -0.4997 0.4817 -0.4963  
## tGravityAccarCoeffY\_4 tGravityAccarCoeffZ\_1 tGravityAccarCoeffZ\_2  
## 7352 0.524 -0.842 0.8615  
## tGravityAccarCoeffZ\_3 tGravityAccarCoeffZ\_4 tGravityAcccorrelationX\_Y  
## 7352 -0.8805 0.8956 0.2528  
## tGravityAcccorrelationX\_Z tGravityAcccorrelationY\_Z tBodyAccJerkmeanX  
## 7352 -0.1231 0.2952 0.07505  
## tBodyAccJerkmeanY tBodyAccJerkmeanZ tBodyAccJerkstdX tBodyAccJerkstdY  
## 7352 0.0114 -0.2857 -0.3205 -0.4694  
## tBodyAccJerkstdZ tBodyAccJerkmadX tBodyAccJerkmadY tBodyAccJerkmadZ  
## 7352 -0.7127 -0.4135 -0.4477 -0.6804  
## tBodyAccJerkmaxX tBodyAccJerkmaxY tBodyAccJerkmaxZ tBodyAccJerkminX  
## 7352 -0.1284 -0.5993 -0.7689 0.02911  
## tBodyAccJerkminY tBodyAccJerkminZ tBodyAccJerksma tBodyAccJerkenergyX  
## 7352 0.4625 0.7275 -0.4845 -0.7665  
## tBodyAccJerkenergyY tBodyAccJerkenergyZ tBodyAccJerkiqrX  
## 7352 -0.8555 -0.955 -0.4606  
## tBodyAccJerkiqrY tBodyAccJerkiqrZ tBodyAccJerkentropyX  
## 7352 -0.539 -0.6152 0.5245  
## tBodyAccJerkentropyY tBodyAccJerkentropyZ tBodyAccJerkarCoeffX\_1  
## 7352 0.5054 0.3223 -0.3937  
## tBodyAccJerkarCoeffX\_2 tBodyAccJerkarCoeffX\_3 tBodyAccJerkarCoeffX\_4  
## 7352 0.2954 -0.04137 -0.003617  
## tBodyAccJerkarCoeffY\_1 tBodyAccJerkarCoeffY\_2 tBodyAccJerkarCoeffY\_3  
## 7352 -0.4721 0.3221 -0.07749  
## tBodyAccJerkarCoeffY\_4 tBodyAccJerkarCoeffZ\_1 tBodyAccJerkarCoeffZ\_2  
## 7352 0.1565 -0.3426 -0.1123  
## tBodyAccJerkarCoeffZ\_3 tBodyAccJerkarCoeffZ\_4  
## 7352 -0.05067 -0.3487  
## tBodyAccJerkcorrelationX\_Y tBodyAccJerkcorrelationX\_Z  
## 7352 -0.4205 -0.1663  
## tBodyAccJerkcorrelationY\_Z tBodyGyromeanX tBodyGyromeanY  
## 7352 0.1664 -0.04181 -0.3225  
## tBodyGyromeanZ tBodyGyrostdX tBodyGyrostdY tBodyGyrostdZ  
## 7352 0.03825 -0.4512 0.02222 -0.2201  
## tBodyGyromadX tBodyGyromadY tBodyGyromadZ tBodyGyromaxX tBodyGyromaxY  
## 7352 -0.4828 -0.07368 -0.2361 -0.4136 -0.2211  
## tBodyGyromaxZ tBodyGyrominX tBodyGyrominY tBodyGyrominZ tBodyGyrosma  
## 7352 -0.2623 0.3904 0.4526 0.2774 -0.08496  
## tBodyGyroenergyX tBodyGyroenergyY tBodyGyroenergyZ tBodyGyroiqrX  
## 7352 -0.8623 -0.4743 -0.7172 -0.5153  
## tBodyGyroiqrY tBodyGyroiqrZ tBodyGyroentropyX tBodyGyroentropyY  
## 7352 -0.371 -0.3479 0.08656 -0.4272  
## tBodyGyroentropyZ tBodyGyroarCoeffX\_1 tBodyGyroarCoeffX\_2  
## 7352 0.3879 -0.3117 0.1157  
## tBodyGyroarCoeffX\_3 tBodyGyroarCoeffX\_4 tBodyGyroarCoeffY\_1  
## 7352 0.2851 -0.2462 -0.715  
## tBodyGyroarCoeffY\_2 tBodyGyroarCoeffY\_3 tBodyGyroarCoeffY\_4  
## 7352 0.6726 -0.6948 0.5627  
## tBodyGyroarCoeffZ\_1 tBodyGyroarCoeffZ\_2 tBodyGyroarCoeffZ\_3  
## 7352 -0.7209 0.6442 -0.497  
## tBodyGyroarCoeffZ\_4 tBodyGyrocorrelationX\_Y tBodyGyrocorrelationX\_Z  
## 7352 0.4129 -0.3479 -0.3251  
## tBodyGyrocorrelationY\_Z tBodyGyroJerkmeanX tBodyGyroJerkmeanY  
## 7352 0.1889 0.263 0.09567  
## tBodyGyroJerkmeanZ tBodyGyroJerkstdX tBodyGyroJerkstdY  
## 7352 -0.2158 -0.6955 -0.6923  
## tBodyGyroJerkstdZ tBodyGyroJerkmadX tBodyGyroJerkmadY  
## 7352 -0.6119 -0.6888 -0.7028  
## tBodyGyroJerkmadZ tBodyGyroJerkmaxX tBodyGyroJerkmaxY  
## 7352 -0.5983 -0.7503 -0.7785  
## tBodyGyroJerkmaxZ tBodyGyroJerkminX tBodyGyroJerkminY  
## 7352 -0.6978 0.8006 0.7808  
## tBodyGyroJerkminZ tBodyGyroJerksma tBodyGyroJerkenergyX  
## 7352 0.6917 -0.6744 -0.9519  
## tBodyGyroJerkenergyY tBodyGyroJerkenergyZ tBodyGyroJerkiqrX  
## 7352 -0.952 -0.9228 -0.6699  
## tBodyGyroJerkiqrY tBodyGyroJerkiqrZ tBodyGyroJerkentropyX  
## 7352 -0.7117 -0.6169 0.6605  
## tBodyGyroJerkentropyY tBodyGyroJerkentropyZ tBodyGyroJerkarCoeffX\_1  
## 7352 0.4499 0.6338 -0.1052  
## tBodyGyroJerkarCoeffX\_2 tBodyGyroJerkarCoeffX\_3  
## 7352 -0.09082 0.2369  
## tBodyGyroJerkarCoeffX\_4 tBodyGyroJerkarCoeffY\_1  
## 7352 0.08944 -0.627  
## tBodyGyroJerkarCoeffY\_2 tBodyGyroJerkarCoeffY\_3  
## 7352 0.4426 -0.1922  
## tBodyGyroJerkarCoeffY\_4 tBodyGyroJerkarCoeffZ\_1  
## 7352 -0.3503 -0.726  
## tBodyGyroJerkarCoeffZ\_2 tBodyGyroJerkarCoeffZ\_3  
## 7352 0.4463 -0.2916  
## tBodyGyroJerkarCoeffZ\_4 tBodyGyroJerkcorrelationX\_Y  
## 7352 -0.07467 0.05288  
## tBodyGyroJerkcorrelationX\_Z tBodyGyroJerkcorrelationY\_Z  
## 7352 -0.2307 -0.226  
## tBodyAccMagmean tBodyAccMagstd tBodyAccMagmad tBodyAccMagmax  
## 7352 -0.04909 -0.2292 -0.3457 -0.05191  
## tBodyAccMagmin tBodyAccMagsma tBodyAccMagenergy tBodyAccMagiqr  
## 7352 -0.6255 -0.04909 -0.5429 -0.5177  
## tBodyAccMagentropy tBodyAccMagarCoeff1 tBodyAccMagarCoeff2  
## 7352 0.7535 -0.3929 0.3898  
## tBodyAccMagarCoeff3 tBodyAccMagarCoeff4 tGravityAccMagmean  
## 7352 -0.5743 0.4996 -0.04909  
## tGravityAccMagstd tGravityAccMagmad tGravityAccMagmax  
## 7352 -0.2292 -0.3457 -0.05191  
## tGravityAccMagmin tGravityAccMagsma tGravityAccMagenergy  
## 7352 -0.6255 -0.04909 -0.5429  
## tGravityAccMagiqr tGravityAccMagentropy tGravityAccMagarCoeff1  
## 7352 -0.5177 0.7535 -0.3929  
## tGravityAccMagarCoeff2 tGravityAccMagarCoeff3 tGravityAccMagarCoeff4  
## 7352 0.3898 -0.5743 0.4996  
## tBodyAccJerkMagmean tBodyAccJerkMagstd tBodyAccJerkMagmad  
## 7352 -0.4758 -0.3133 -0.4376  
## tBodyAccJerkMagmax tBodyAccJerkMagmin tBodyAccJerkMagsma  
## 7352 -0.2761 -0.6516 -0.4758  
## tBodyAccJerkMagenergy tBodyAccJerkMagiqr tBodyAccJerkMagentropy  
## 7352 -0.8256 -0.6018 0.5895  
## tBodyAccJerkMagarCoeff1 tBodyAccJerkMagarCoeff2  
## 7352 -0.448 0.4821  
## tBodyAccJerkMagarCoeff3 tBodyAccJerkMagarCoeff4 tBodyGyroMagmean  
## 7352 -0.4014 0.3781 -0.1004  
## tBodyGyroMagstd tBodyGyroMagmad tBodyGyroMagmax tBodyGyroMagmin  
## 7352 -0.0957 -0.02375 -0.1868 -0.7206  
## tBodyGyroMagsma tBodyGyroMagenergy tBodyGyroMagiqr  
## 7352 -0.1004 -0.5496 -0.1049  
## tBodyGyroMagentropy tBodyGyroMagarCoeff1 tBodyGyroMagarCoeff2  
## 7352 0.4484 -0.7045 0.7368  
## tBodyGyroMagarCoeff3 tBodyGyroMagarCoeff4 tBodyGyroJerkMagmean  
## 7352 -0.7386 0.5414 -0.6716  
## tBodyGyroJerkMagstd tBodyGyroJerkMagmad tBodyGyroJerkMagmax  
## 7352 -0.7199 -0.74 -0.7652  
## tBodyGyroJerkMagmin tBodyGyroJerkMagsma tBodyGyroJerkMagenergy  
## 7352 -0.7048 -0.6716 -0.9479  
## tBodyGyroJerkMagiqr tBodyGyroJerkMagentropy tBodyGyroJerkMagarCoeff1  
## 7352 -0.7864 0.7563 0.03531  
## tBodyGyroJerkMagarCoeff2 tBodyGyroJerkMagarCoeff3  
## 7352 -0.02188 -0.0244  
## tBodyGyroJerkMagarCoeff4 fBodyAccmeanX fBodyAccmeanY fBodyAccmeanZ  
## 7352 -0.1754 -0.2653 -0.2204 -0.2728  
## fBodyAccstdX fBodyAccstdY fBodyAccstdZ fBodyAccmadX fBodyAccmadY  
## 7352 -0.2708 -0.08011 0.2894 -0.1145 -0.08815  
## fBodyAccmadZ fBodyAccmaxX fBodyAccmaxY fBodyAccmaxZ fBodyAccminX  
## 7352 -0.01519 -0.4176 -0.2762 0.4497 -0.9168  
## fBodyAccminY fBodyAccminZ fBodyAccsma fBodyAccenergyX fBodyAccenergyY  
## 7352 -0.9718 -0.8364 -0.1426 -0.731 -0.5784  
## fBodyAccenergyZ fBodyAcciqrX fBodyAcciqrY fBodyAcciqrZ  
## 7352 -0.2988 -0.2515 -0.4097 -0.7117  
## fBodyAccentropyX fBodyAccentropyY fBodyAccentropyZ fBodyAccmaxIndsX  
## 7352 0.5889 0.4531 0.2277 -0.8065  
## fBodyAccmaxIndsY fBodyAccmaxIndsZ fBodyAccmeanFreqX fBodyAccmeanFreqY  
## 7352 -0.9333 -0.9231 -0.5661 -0.4224  
## fBodyAccmeanFreqZ fBodyAccskewnessX fBodyAcckurtosisX  
## 7352 -0.5864 -0.2436 -0.633  
## fBodyAccskewnessY fBodyAcckurtosisY fBodyAccskewnessZ  
## 7352 -0.2469 -0.6064 0.2283  
## fBodyAcckurtosisZ fBodyAccbandsEnergy1\_8 fBodyAccbandsEnergy9\_16  
## 7352 -0.04095 -0.7095 -0.8657  
## fBodyAccbandsEnergy17\_24 fBodyAccbandsEnergy25\_32  
## 7352 -0.7133 -0.8296  
## fBodyAccbandsEnergy33\_40 fBodyAccbandsEnergy41\_48  
## 7352 -0.9129 -0.9052  
## fBodyAccbandsEnergy49\_56 fBodyAccbandsEnergy57\_64  
## 7352 -0.9685 -0.999  
## fBodyAccbandsEnergy1\_16 fBodyAccbandsEnergy17\_32  
## 7352 -0.7285 -0.7032  
## fBodyAccbandsEnergy33\_48 fBodyAccbandsEnergy49\_64  
## 7352 -0.91 -0.9787  
## fBodyAccbandsEnergy1\_24 fBodyAccbandsEnergy25\_48  
## 7352 -0.7274 -0.8351  
## fBodyAccbandsEnergy1\_8.1 fBodyAccbandsEnergy9\_16.1  
## 7352 -0.4738 -0.9111  
## fBodyAccbandsEnergy17\_24.1 fBodyAccbandsEnergy25\_32.1  
## 7352 -0.9142 -0.9178  
## fBodyAccbandsEnergy33\_40.1 fBodyAccbandsEnergy41\_48.1  
## 7352 -0.9198 -0.9623  
## fBodyAccbandsEnergy49\_56.1 fBodyAccbandsEnergy57\_64.1  
## 7352 -0.9621 -0.9997  
## fBodyAccbandsEnergy1\_16.1 fBodyAccbandsEnergy17\_32.1  
## 7352 -0.5511 -0.8934  
## fBodyAccbandsEnergy33\_48.1 fBodyAccbandsEnergy49\_64.1  
## 7352 -0.927 -0.9767  
## fBodyAccbandsEnergy1\_24.1 fBodyAccbandsEnergy25\_48.1  
## 7352 -0.5746 -0.9165  
## fBodyAccbandsEnergy1\_8.2 fBodyAccbandsEnergy9\_16.2  
## 7352 -0.1068 -0.9397  
## fBodyAccbandsEnergy17\_24.2 fBodyAccbandsEnergy25\_32.2  
## 7352 -0.9743 -0.9792  
## fBodyAccbandsEnergy33\_40.2 fBodyAccbandsEnergy41\_48.2  
## 7352 -0.9934 -0.9451  
## fBodyAccbandsEnergy49\_56.2 fBodyAccbandsEnergy57\_64.2  
## 7352 -0.9053 -0.8637  
## fBodyAccbandsEnergy1\_16.2 fBodyAccbandsEnergy17\_32.2  
## 7352 -0.2665 -0.9761  
## fBodyAccbandsEnergy33\_48.2 fBodyAccbandsEnergy49\_64.2  
## 7352 -0.9804 -0.892  
## fBodyAccbandsEnergy1\_24.2 fBodyAccbandsEnergy25\_48.2  
## 7352 -0.2874 -0.9795  
## fBodyAccJerkmeanX fBodyAccJerkmeanY fBodyAccJerkmeanZ  
## 7352 -0.3568 -0.4827 -0.6849  
## fBodyAccJerkstdX fBodyAccJerkstdY fBodyAccJerkstdZ fBodyAccJerkmadX  
## 7352 -0.3425 -0.4912 -0.7386 -0.1848  
## fBodyAccJerkmadY fBodyAccJerkmadZ fBodyAccJerkmaxX fBodyAccJerkmaxY  
## 7352 -0.4609 -0.7194 -0.4781 -0.6406  
## fBodyAccJerkmaxZ fBodyAccJerkminX fBodyAccJerkminY fBodyAccJerkminZ  
## 7352 -0.7719 -0.8064 -0.91 -0.9416  
## fBodyAccJerksma fBodyAccJerkenergyX fBodyAccJerkenergyY  
## 7352 -0.4091 -0.7661 -0.8555  
## fBodyAccJerkenergyZ fBodyAccJerkiqrX fBodyAccJerkiqrY  
## 7352 -0.9551 -0.235 -0.5187  
## fBodyAccJerkiqrZ fBodyAccJerkentropyX fBodyAccJerkentropyY  
## 7352 -0.7402 0.5518 0.3409  
## fBodyAccJerkentropyZ fBodyAccJerkmaxIndsX fBodyAccJerkmaxIndsY  
## 7352 0.07531 -0.32 -0.4  
## fBodyAccJerkmaxIndsZ fBodyAccJerkmeanFreqX fBodyAccJerkmeanFreqY  
## 7352 -0.96 -0.3156 -0.6338  
## fBodyAccJerkmeanFreqZ fBodyAccJerkskewnessX fBodyAccJerkkurtosisX  
## 7352 -0.6638 -0.2761 -0.7396  
## fBodyAccJerkskewnessY fBodyAccJerkkurtosisY fBodyAccJerkskewnessZ  
## 7352 -0.5093 -0.9135 -0.4381  
## fBodyAccJerkkurtosisZ fBodyAccJerkbandsEnergy1\_8  
## 7352 -0.8037 -0.8342  
## fBodyAccJerkbandsEnergy9\_16 fBodyAccJerkbandsEnergy17\_24  
## 7352 -0.8439 -0.7356  
## fBodyAccJerkbandsEnergy25\_32 fBodyAccJerkbandsEnergy33\_40  
## 7352 -0.8155 -0.8999  
## fBodyAccJerkbandsEnergy41\_48 fBodyAccJerkbandsEnergy49\_56  
## 7352 -0.8638 -0.945  
## fBodyAccJerkbandsEnergy57\_64 fBodyAccJerkbandsEnergy1\_16  
## 7352 -0.9946 -0.8258  
## fBodyAccJerkbandsEnergy17\_32 fBodyAccJerkbandsEnergy33\_48  
## 7352 -0.709 -0.8767  
## fBodyAccJerkbandsEnergy49\_64 fBodyAccJerkbandsEnergy1\_24  
## 7352 -0.9449 -0.7591  
## fBodyAccJerkbandsEnergy25\_48 fBodyAccJerkbandsEnergy1\_8.1  
## 7352 -0.7809 -0.7008  
## fBodyAccJerkbandsEnergy9\_16.1 fBodyAccJerkbandsEnergy17\_24.1  
## 7352 -0.9059 -0.8975  
## fBodyAccJerkbandsEnergy25\_32.1 fBodyAccJerkbandsEnergy33\_40.1  
## 7352 -0.915 -0.9239  
## fBodyAccJerkbandsEnergy41\_48.1 fBodyAccJerkbandsEnergy49\_56.1  
## 7352 -0.951 -0.9554  
## fBodyAccJerkbandsEnergy57\_64.1 fBodyAccJerkbandsEnergy1\_16.1  
## 7352 -0.998 -0.8442  
## fBodyAccJerkbandsEnergy17\_32.1 fBodyAccJerkbandsEnergy33\_48.1  
## 7352 -0.8852 -0.9172  
## fBodyAccJerkbandsEnergy49\_64.1 fBodyAccJerkbandsEnergy1\_24.1  
## 7352 -0.9607 -0.8416  
## fBodyAccJerkbandsEnergy25\_48.1 fBodyAccJerkbandsEnergy1\_8.2  
## 7352 -0.9147 -0.7726  
## fBodyAccJerkbandsEnergy9\_16.2 fBodyAccJerkbandsEnergy17\_24.2  
## 7352 -0.9496 -0.976  
## fBodyAccJerkbandsEnergy25\_32.2 fBodyAccJerkbandsEnergy33\_40.2  
## 7352 -0.9789 -0.9935  
## fBodyAccJerkbandsEnergy41\_48.2 fBodyAccJerkbandsEnergy49\_56.2  
## 7352 -0.9526 -0.9726  
## fBodyAccJerkbandsEnergy57\_64.2 fBodyAccJerkbandsEnergy1\_16.2  
## 7352 -0.9982 -0.8762  
## fBodyAccJerkbandsEnergy17\_32.2 fBodyAccJerkbandsEnergy33\_48.2  
## 7352 -0.9775 -0.9807  
## fBodyAccJerkbandsEnergy49\_64.2 fBodyAccJerkbandsEnergy1\_24.2  
## 7352 -0.9738 -0.9287  
## fBodyAccJerkbandsEnergy25\_48.2 fBodyGyromeanX fBodyGyromeanY  
## 7352 -0.9796 -0.3472 -0.2875  
## fBodyGyromeanZ fBodyGyrostdX fBodyGyrostdY fBodyGyrostdZ  
## 7352 -0.3089 -0.4848 0.1664 -0.2643  
## fBodyGyromadX fBodyGyromadY fBodyGyromadZ fBodyGyromaxX fBodyGyromaxY  
## 7352 -0.4257 -0.1202 -0.2125 -0.3991 0.07596  
## fBodyGyromaxZ fBodyGyrominX fBodyGyrominY fBodyGyrominZ fBodyGyrosma  
## 7352 -0.458 -0.8929 -0.6474 -0.8421 -0.2682  
## fBodyGyroenergyX fBodyGyroenergyY fBodyGyroenergyZ fBodyGyroiqrX  
## 7352 -0.8486 -0.4762 -0.6937 -0.7046  
## fBodyGyroiqrY fBodyGyroiqrZ fBodyGyroentropyX fBodyGyroentropyY  
## 7352 -0.63 -0.5991 0.4788 0.4667  
## fBodyGyroentropyZ fBodyGyromaxIndsX fBodyGyromaxIndsY  
## 7352 0.3583 -1 -0.9355  
## fBodyGyromaxIndsZ fBodyGyromeanFreqX fBodyGyromeanFreqY  
## 7352 -0.7931 0.002108 -0.7381  
## fBodyGyromeanFreqZ fBodyGyroskewnessX fBodyGyrokurtosisX  
## 7352 -0.3472 0.1025 -0.2024  
## fBodyGyroskewnessY fBodyGyrokurtosisY fBodyGyroskewnessZ  
## 7352 0.03746 -0.3716 -0.06954  
## fBodyGyrokurtosisZ fBodyGyrobandsEnergy1\_8 fBodyGyrobandsEnergy9\_16  
## 7352 -0.4833 -0.8568 -0.92  
## fBodyGyrobandsEnergy17\_24 fBodyGyrobandsEnergy25\_32  
## 7352 -0.9205 -0.9543  
## fBodyGyrobandsEnergy33\_40 fBodyGyrobandsEnergy41\_48  
## 7352 -0.8698 -0.862  
## fBodyGyrobandsEnergy49\_56 fBodyGyrobandsEnergy57\_64  
## 7352 -0.8137 -0.7902  
## fBodyGyrobandsEnergy1\_16 fBodyGyrobandsEnergy17\_32  
## 7352 -0.8535 -0.9174  
## fBodyGyrobandsEnergy33\_48 fBodyGyrobandsEnergy49\_64  
## 7352 -0.8535 -0.8033  
## fBodyGyrobandsEnergy1\_24 fBodyGyrobandsEnergy25\_48  
## 7352 -0.8517 -0.9247  
## fBodyGyrobandsEnergy1\_8.1 fBodyGyrobandsEnergy9\_16.1  
## 7352 -0.1293 -0.9554  
## fBodyGyrobandsEnergy17\_24.1 fBodyGyrobandsEnergy25\_32.1  
## 7352 -0.9789 -0.9802  
## fBodyGyrobandsEnergy33\_40.1 fBodyGyrobandsEnergy41\_48.1  
## 7352 -0.989 -0.9825  
## fBodyGyrobandsEnergy49\_56.1 fBodyGyrobandsEnergy57\_64.1  
## 7352 -0.9715 -0.976  
## fBodyGyrobandsEnergy1\_16.1 fBodyGyrobandsEnergy17\_32.1  
## 7352 -0.3847 -0.9743  
## fBodyGyrobandsEnergy33\_48.1 fBodyGyrobandsEnergy49\_64.1  
## 7352 -0.9875 -0.9696  
## fBodyGyrobandsEnergy1\_24.1 fBodyGyrobandsEnergy25\_48.1  
## 7352 -0.4187 -0.981  
## fBodyGyrobandsEnergy1\_8.2 fBodyGyrobandsEnergy9\_16.2  
## 7352 -0.7099 -0.9314  
## fBodyGyrobandsEnergy17\_24.2 fBodyGyrobandsEnergy25\_32.2  
## 7352 -0.9538 -0.9757  
## fBodyGyrobandsEnergy33\_40.2 fBodyGyrobandsEnergy41\_48.2  
## 7352 -0.9769 -0.9586  
## fBodyGyrobandsEnergy49\_56.2 fBodyGyrobandsEnergy57\_64.2  
## 7352 -0.937 -0.9371  
## fBodyGyrobandsEnergy1\_16.2 fBodyGyrobandsEnergy17\_32.2  
## 7352 -0.701 -0.9442  
## fBodyGyrobandsEnergy33\_48.2 fBodyGyrobandsEnergy49\_64.2  
## 7352 -0.9719 -0.937  
## fBodyGyrobandsEnergy1\_24.2 fBodyGyrobandsEnergy25\_48.2  
## 7352 -0.6962 -0.9745  
## fBodyAccMagmean fBodyAccMagstd fBodyAccMagmad fBodyAccMagmax  
## 7352 -0.24 -0.3427 -0.1466 -0.62  
## fBodyAccMagmin fBodyAccMagsma fBodyAccMagenergy fBodyAccMagiqr  
## 7352 -0.9286 -0.24 -0.6981 -0.216  
## fBodyAccMagentropy fBodyAccMagmaxInds fBodyAccMagmeanFreq  
## 7352 0.5741 -0.931 -0.215  
## fBodyAccMagskewness fBodyAccMagkurtosis fBodyBodyAccJerkMagmean  
## 7352 -0.5728 -0.8616 -0.338  
## fBodyBodyAccJerkMagstd fBodyBodyAccJerkMagmad fBodyBodyAccJerkMagmax  
## 7352 -0.2872 -0.1911 -0.5499  
## fBodyBodyAccJerkMagmin fBodyBodyAccJerkMagsma  
## 7352 -0.8377 -0.338  
## fBodyBodyAccJerkMagenergy fBodyBodyAccJerkMagiqr  
## 7352 -0.7591 -0.4347  
## fBodyBodyAccJerkMagentropy fBodyBodyAccJerkMagmaxInds  
## 7352 0.2987 -0.9048  
## fBodyBodyAccJerkMagmeanFreq fBodyBodyAccJerkMagskewness  
## 7352 -0.2424 -0.3219  
## fBodyBodyAccJerkMagkurtosis fBodyBodyGyroMagmean fBodyBodyGyroMagstd  
## 7352 -0.7685 -0.3308 -0.106  
## fBodyBodyGyroMagmad fBodyBodyGyroMagmax fBodyBodyGyroMagmin  
## 7352 -0.1065 -0.09054 -0.7792  
## fBodyBodyGyroMagsma fBodyBodyGyroMagenergy fBodyBodyGyroMagiqr  
## 7352 -0.3308 -0.5894 -0.2906  
## fBodyBodyGyroMagentropy fBodyBodyGyroMagmaxInds  
## 7352 0.4365 -0.8462  
## fBodyBodyGyroMagmeanFreq fBodyBodyGyroMagskewness  
## 7352 -0.3891 -0.05758  
## fBodyBodyGyroMagkurtosis fBodyBodyGyroJerkMagmean  
## 7352 -0.388 -0.7156  
## fBodyBodyGyroJerkMagstd fBodyBodyGyroJerkMagmad  
## 7352 -0.7451 -0.6974  
## fBodyBodyGyroJerkMagmax fBodyBodyGyroJerkMagmin  
## 7352 -0.7836 -0.7587  
## fBodyBodyGyroJerkMagsma fBodyBodyGyroJerkMagenergy  
## 7352 -0.7156 -0.96  
## fBodyBodyGyroJerkMagiqr fBodyBodyGyroJerkMagentropy  
## 7352 -0.6772 0.202  
## fBodyBodyGyroJerkMagmaxInds fBodyBodyGyroJerkMagmeanFreq  
## 7352 -0.9048 -0.0584  
## fBodyBodyGyroJerkMagskewness fBodyBodyGyroJerkMagkurtosis  
## 7352 -0.3871 -0.7407  
## angletBodyAccMean\_gravity angletBodyAccJerkMean\_gravityMean  
## 7352 -0.2801 -0.007739  
## angletBodyGyroMean\_gravityMean angletBodyGyroJerkMean\_gravityMean  
## 7352 -0.05609 -0.617  
## angleX\_gravityMean angleY\_gravityMean angleZ\_gravityMean  
## 7352 -0.7833 0.2468 0.03669

xData\_train = xData  
  
# Save data sets to the 'data' subdirectory,  
# one level ABOVE 'UCI HAR Dataset' sub-subdirectory  
setwd("../../")  
  
# Save current workspace  
print("Saving workspace to 'run\_analysis.RData'")

## [1] "Saving workspace to 'run\_analysis.RData'"

save(list = ls(all = TRUE), file = "run\_analysis.RData")