DATA DICTIONARY - UCI HAR DATASET

OUTPUT FROM THE readData() function

-subject: factor variable ranging from 1 TO 30
It identifies the subject of the experiment

-activity: factor variable ranging from 1 TO 6
It identifies the activity carried out.

NUM	ACTIVITY
1:	WALKING
2:	WALKING_UPSTAIRS
3:	WALKING_DOWNSTAIRS
4:	SITTING
5:	STANDING
6:	LAYING

-train: boolean variable
It identifies if the subject is from "train" or "test" group

0: subject from test group
1: subject from train group

- A 561 feature vector with 3 axial (X, Y, Z) time and frequency domain variables in double precision numeric values.

Variables:
a "t" is added at the beginning of variables names in the time domain
a "f" is added at the beginning of variables names in the frequency domain
This means that the x value of Body Acc variable in the time domain is called "tBodyAcc-x" while the correspondant variable in the f domain is called "tBodyAcc-y"

Variable	Time	Frequency
Body Acc	Yes	Yes
Gravity Acc	Yes	No
Body Acc Jerk	Yes	Yes
Body Angular Speed	Yes	Yes
Body Angular Acc	Yes	No
Body Acc Magnitude	Yes	Yes
Gravity Acc Mag	Yes	No
Body Acc Jerk Mag	Yes	Yes
Body Angular Speed Mag	Yes	Yes
Body Angular Acc Mag	Yes	Yes

Functions:

Function	Description
mean	Mean value
std	Standard deviation
Mad	Median absolute value
Max	Largest values in array

min	Smallest value in array
sma	Signal magnitude area
energy	Average sum of the squares
iqr	Interquartile range
Entropy	Signal Entropy
arCoeff	Autorregresion coefficients
correlation	Correlation coefficient
maxFreqInd	Largest frequency component
meanFreq	Frequency signal weighted average
skewness	Frequency signal Skewness
kurtosis	Frequency signal Kurtosis
energyBand	Energy of a frequency interval
angle	Angle between two vectors