Code Book Project Getting and Cleaning Data

Objective: Presentations of data to indicate variables and summaries that are calculated with the scrip "run_analysis.R" presented in this project.

General description

The scrip follows 5 step :
1 Merge the training and the test sets: X_test.txt and X_train.txt, and Y_test.txt and Y_test.txt.
TableX and TableY are obtained of merging test and train files. No change inunits is done.
At the end, when required subject_test.txt and subject_train.txt are merged

2 Extract the mean and standard deviation of each measurements are of the 3-axial vector for velocity and accelerations and Jerk components.
Names to be extracted variables are obtain in the variable "col" . Mean and standard deviation of the measured variables are extracted. The data set "TableXMS" is obtained

3. Names of activities are added observations of data set as column from merge in 1 for Y files
Activity labels are read and bind to data set to obtain the data set "TableN".
This DS is written at the of the process in the file "TableN.csv"
4 Columns are named with appropriated names of variables using "features.txt"
"varName" contains the name of the variables selected. TableN contains the names for each variable and the name of the activity for each observation.

5 The data set obtained is grouped by activity and the mean value of variables selected is obtained. See file "ActMean.csv"
A Data set that conbied the tes and train subject information per observation is binded in the file "Subj".
This data is binded to the data set as an additional column to get the file "Ntable"
This data set is grouped by activity to get the file "ActiG". The mean value for each group is calculate and summarized. This DS is written in the file "ActivityGMeans.csv"
In addition, data set is grouped by subject and the mean value of variables selected is obtained in the DS "SubjG" and is summirised to be written in the file "SubjectGMeans.csv".