Code Book for Cleaning and Tidying Assignment

The dataset in "final.data.txt" is made up of the following variables, each of which has its own column

"Activities"

One of 6 different activities:

- LAYING
- SITTING
- STANDING
- WALKING
- WALKING DOWNSTAIRS
- WALKING UPSTAIRS

"Subject"

This represents the subject in the trial. There was 30 subjects and they were assigned the identifiers 1 through 30.

Mean Columns

"tBodyAcc-mean()-X"

The remaining 79 columns represent the mean values calculated for each activity and subject over various different variables. Some of these are the mean of means while others are the mean of standard deviations. All data had been normalised and so is dimensionless. The names of each of column are partly descriptive with more information being available in the "features.txt" file

```
"tBodyAcc-mean()-Y"
"tBodyAcc-mean()-Z"
"tGravityAcc-mean()-X"
"tGravityAcc-mean()-Y"
"tGravityAcc-mean()-Z"
"tBodyAccJerk-mean()-X"
"tBodyAccJerk-mean()-Y"
"tBodyAccJerk-mean()-Z"
"tBodyGyro-mean()-X"
"tBodyGyro-mean()-Y"
"tBodyGyro-mean()-Z"
"tBodyGyroJerk-mean()-X"
"tBodyGyroJerk-mean()-Y"
"tBodyGyroJerk-mean()-Z"
"tBodyAccMag-mean()"
"tGravityAccMag-mean()"
"tBodyAccJerkMag-mean()"
"tBodyGyroMag-mean()"
"tBodyGyroJerkMag-mean()"
"fBodyAcc-mean()-X"
"fBodyAcc-mean()-Y"
```

```
"fBodyAcc-mean()-Z"
```

- "fBodyAcc-meanFreq()-X"
- "fBodyAcc-meanFreq()-Y"
- "fBodyAcc-meanFreq()-Z"
- "fBodyAccJerk-mean()-X"
- "fBodyAccJerk-mean()-Y"
- "fBodyAccJerk-mean()-Z"
- "fBodyAccJerk-meanFreq()-X"
- "fBodyAccJerk-meanFreq()-Y"
- "fBodyAccJerk-meanFreq()-Z"
- "fBodyGyro-mean()-X"
- "fBodyGyro-mean()-Y"
- "fBodyGyro-mean()-Z"
- "fBodyGyro-meanFreq()-X"
- "fBodyGyro-meanFreq()-Y"
- "fBodyGyro-meanFreq()-Z"
- "fBodyAccMag-mean()"
- "fBodyAccMag-meanFreq()"
- "fBodyBodyAccJerkMag-mean()"
- "fBodyBodyAccJerkMag-meanFreq()"
- "fBodyBodyGyroMag-mean()"
- "fBodyBodyGyroMag-meanFreq()"
- "fBodyBodyGyroJerkMag-mean()"
- "fBodyBodyGyroJerkMag-meanFreq()"
- "tBodyAcc-std()-X"
- "tBodyAcc-std()-Y"
- "tBodyAcc-std()-Z"
- "tGravityAcc-std()-X"
- "tGravityAcc-std()-Y"
- "tGravityAcc-std()-Z"
- "tBodyAccJerk-std()-X"
- "tBodyAccJerk-std()-Y"
- "tBodyAccJerk-std()-Z"
- "tBodyGyro-std()-X"
- "tBodyGyro-std()-Y"
- "tBodyGyro-std()-Z"
- "tBodyGyroJerk-std()-X"
- "tBodyGyroJerk-std()-Y"
- "tBodyGyroJerk-std()-Z"
- "tBodyAccMag-std()"
- "tGravityAccMag-std()"
- "tBodyAccJerkMag-std()"
- "tBodyGyroMag-std()"
- "tBodyGyroJerkMag-std()"
- "fBodyAcc-std()-X"
- "fBodyAcc-std()-Y"
- "fBodyAcc-std()-Z"
- "fBodyAccJerk-std()-X"
- "fBodyAccJerk-std()-Y"

- "fBodyAccJerk-std()-Z"
- "fBodyGyro-std()-X"
- "fBodyGyro-std()-Y"
- "fBodyGyro-std()-Z"
- "fBodyAccMag-std()"
- "fBodyBodyAccJerkMag-std()"
 "fBodyBodyGyroMag-std()"
- "fBodyBodyGyroJerkMag-std()"