Code Book

The name of the file that contains the Tidy Data that is required is “TidyData2.txt”. The names variables are indicated in **bold** typeface.

Subject integer identifying the volunteers
1..30 unique identifier for each subject

Activities subject’s activities - characters
STANDING
SITTING
LAYING
WALKING
WALKING_DOWNSTAIRS
WALKING_UPSTAIRS

Each of the parameters below is the averages of the measurement of the given activity by the given subject identified in the previous two columns. They are all in numeric forms.

tBodyAccMeanX estimated mean value of time domain signals of body acceleration measurements in X direction

tBodyAccMeanY estimated mean value of time domain signals of body acceleration measurements in Y direction from time domain

tBodyAccMeanZ estimated mean value of time domain signals of body acceleration measurements in Z direction from time domain

tBodyAccStdX estimated standard deviation of body acceleration measurements of time domain signals in X direction from time domain

tBodyAccStdY estimated standard deviation of body acceleration measurements of time domain signals in Y direction from time domain

tBodyAccStdZ estimated standard deviation of body acceleration measurements of time domain signals in Z direction from time domain

tGravityAccMeanX estimated mean value of body acceleration measurements in time domain signals in X direction from time domain

tGravityAccMeanY	estimated mean value of gravity acceleration measurements in time domain signals in Y direction
tGravityAccMeanZ	estimated mean value of gravity acceleration measurements in time domain signals in Z direction
tGravityAccStdX	estimated standard deviation of gravity acceleration measurements in time domain signals in X direction
tGravityAccStdY	estimated standard deviation of gravity acceleration measurements in time domain signals in Y direction
tGravityAccStdZ	estimated standard deviation of gravity acceleration measurements in time domain signals in Z direction
tBodyAccJerkMeanX	mean value of jerk signals of body acceleration measurements in time domain signals in X direction
tBodyAccJerkMeanY	mean value of jerk signals of body acceleration measurements in time domain signals in Y direction
tBodyAccJerkMeanZ	mean value of jerk signals of body acceleration measurements in time domain signals in Z direction
tBodyAccJerkStdX	standard deviation of jerk signals of body acceleration measurements in time domain signals in X direction
tBodyAccJerkStdY	standard deviation of jerk signals of body acceleration measurements in time domain signals in Y direction
tBodyAccJerkStdZ	standard deviation of jerk signals of body acceleration measurements in time domain signals in Z direction
tBodyGyroMeanX	mean value of time domain signals from gyroscope in X direction
tBodyGyroMeanY	mean value of time domain signals from gyroscope in Y direction
tBodyGyroMeanZ	mean value of time domain signals from gyroscope in Z direction
tBodyGyroStdX	standard deviation of time domain signals from gyroscope in X direction
tBodyGyroStdY	standard deviation of time domain signals from gyroscope in Y

	direction
tBodyGyroStdZ	standard deviation of time domain signals from gyroscope in Z direction
tBodyGyroJerkMeanX	mean value of jerk signals from time domain from gyroscope in X direction
tBodyGyroJerkMeanY	mean value of jerk signals from time domain from gyroscope in Y direction
tBodyGyroJerkMeanZ	mean value of jerk signals from time domain from gyroscope in Z direction
tBodyGyroJerkStdX	standard valuation of jerk signals from gyroscope in X direction
tBodyGyroJerkStdY	standard valuation of jerk signals from time domain from gyroscope in Y direction
tBodyGyroJerkStdZ	standard valuation of jerk signals from time domain from gyroscope in Z direction
tBodyAccMagMean	mean value of the magnitude of body acceleration from time domain signals
tBodyAccMagStd	standard deviation of the magnitude of body acceleration from time domain signals
tGravityAccMagMean	mean magnitude of gravity acceleration from time domain signals
tGravityAccMagStd	standard deviation of magnitude of gravity acceleration from time domain signals
tBodyAccJerkMagMean	mean magnitude of gravity acceleration from time domain signals
tBodyAccJerkMagStd	standard deviation of magnitude of body acceleration in jerk signals from time domain signals
tBodyGyroMagMean	mean magnitude of angular velocity of body measured from time domain signals
tBodyGyroMagStd	standard deviation of magnitude of angular velocity of body measured from time domain signal
tBodyGyroJerkMagMean	mean magnitude of angular velocity of body measured jerk

	signals derived from time domain signals
tBodyGyroJerkMagStd	standard deviation of magnitude of angular velocity of body measured jerk signals derived from time domain signals
fBodyAccMeanX	mean value of body acceleration in X direction after Fast Fourier Transform
fBodyAccMeanY	mean value of body acceleration in Y direction after Fast Fourier Transform
fBodyAccMeanZ	mean value of body acceleration in Z direction after Fast Fourier Transform
fBodyAccStdX	standard deviation of body acceleration in X direction after Fast Fourier Transform
fBodyAccStdY	standard deviation of body acceleration in Y direction after Fast Fourier Transform
fBodyAccStdZ	standard deviation of body acceleration in Z direction after Fast Fourier Transform
fBodyAcc-meanFreqX	mean frequency of of the body acceleration in X direction in Fast Fourier Transform
fBodyAcc-meanFreqY	mean frequency of of the body acceleration in Y direction in Fast Fourier Transform
fBodyAcc-meanFreqZ	mean frequency of of the body acceleration in Z direction in Fast Fourier Transform
fBodyAccJerkMeanX	mean jerk signals of body acceleration in X direction after Fast Fourier Transform
fBodyAccJerkMeanY	mean jerk signals of body acceleration in Y direction after Fast Fourier Transform
fBodyAccJerkMeanZ	mean jerk signals of body acceleration in Z direction after Fast Fourier Transform
fBodyAccJerkStdX	standard deviation of jerk signals of body acceleration in X direction after Fast Fourier Transform
fBodyAccJerkStdY	standard deviation of jerk signals of body acceleration in Y direction after Fast Fourier Transform
fBodyAccJerkStdZ	standard deviation of jerk signals of body acceleration in Z

	direction after Fast Fourier Transform
fBodyAccJerk-meanFreqX	mean frequency of of the jerk signal of the body acceleration in X direction in Fast Fourier Transform
fBodyAccJerk-meanFreqY	mean frequency of of the jerk signal of the body acceleration in Y direction in Fast Fourier Transform
fBodyAccJerk-meanFreqZ	mean frequency of of the jerk signal of the body acceleration in Z direction in Fast Fourier Transform
fBodyGyroMeanX	mean angular body velocity in X direction after Fast Fourier Transform
fBodyGyroMeanY	mean angular body velocity in Y direction after Fast Fourier Transform
fBodyGyroMeanZ	mean angular body velocity in Z direction after Fast Fourier Transform
fBodyGyroStdX	standard deviation of angular body velocity in X direction after Fast Fourier Transform
fBodyGyroStdY	standard deviation of angular body velocity in Y direction after Fast Fourier Transform
fBodyGyroStdZ	standard deviation of angular body velocity in Z direction after Fast Fourier Transform
fBodyGyro-meanFreqX	mean frequency of angular velocity of body in X direction in Fast Fourier Transform
fBodyGyro-meanFreqY	mean frequency of angular velocity of body in Y direction in Fast Fourier Transform
fBodyGyro-meanFreqZ	mean frequency of angular velocity of body in Z direction in Fast Fourier Transform
fBodyAccMagMean	mean magnitude of body acceleration after Fast Fourier Transform
fBodyAccMagStd	standard deviation of magnitude of body acceleration after Fast Fourier Transform
fBodyAccMag-meanFreq	mean frequency of body acceleration after Fast Fourier Transform
fBodyBodyAccJerkMagMean	mean frequency of jerk signals of body acceleration after Fast

	Fourier Transform
fBodyBodyAccJerkMagStd	standard deviation of jerk signals of body acceleration after Fast Fourier Transform
fBodyBodyAccJerkMag-meanFreq	mean frequency of magnitude of jerk signals of body acceleration after Fast Fourier Transform
fBodyBodyGyroMagMean	mean magnitude of angular velocity after Fast Fourier Transform
fBodyBodyGyroMagStd	standard deviation of magnitude of angular velocity after Fast Fourier Transform
fBodyBodyGyroMag-meanFreq	mean frequency of magnitude of angular velocity after Fast Fourier Transform
fBodyBodyGyroJerkMagMean	mean magnitude of jerk signals of angular velocity after Fast Fourier Transform
fBodyBodyGyroJerkMagStd	standard deviation of magnitude of jerk signals of angular velocity after Fast Fourier Transform
fBodyBodyGyroJerkMag-meanFreq	mean frequency of magnitude of jerk signals of angular velocity after Fast Fourier Transform