Codebook			
Variable Name	**Class/ Data Type**	**Range/Levels**	**Description**
subjectid	Integer	1 to 30	Each row identifies the subject who performed the activity
activityname	factor	Levels : "LAYING", "SITTING", "STANDING", "WALKING", "WALKING_DOWNSTAIRS"," WALKING_UPSTAIRS"	The activies performed by each subject.
tBodyAcc-mean()-X	numeric	-	Mean of the X axis - Time Body Acceleration
tBodyAcc-mean()-Y	numeric	-	Mean of the Y axis - Time Body Acceleration
tBodyAcc-mean()-Z	numeric	-	Mean of the Z axis - Time Body Acceleration
tBodyAcc-std()-X	numeric	-	Standard Deviation of the X axis - Time Body Acceleration
tBodyAcc-std()-Y	numeric	-	Standard Deviation of the Y axis - Time Body Acceleration
tBodyAcc-std()-Z	numeric	-	Standard Deviation of the Z axis - Time Body Acceleration
tGravityAcc-mean()-X	numeric	-	Mean of the X axis - Time Gravity Acceleration
tGravityAcc-mean()-Y	numeric	-	Mean of the Y axis - Time Gravity Acceleration
tGravityAcc-mean()-Z	numeric	-	Mean of the Z axis - Time Gravity Acceleration
tGravityAcc-std()-X	numeric	-	Standard Deviation of the X axis - Time Gravity Acceleration
tGravityAcc-std()-Y	numeric	-	Standard Deviation of the Y axis - Time Gravity Acceleration
tGravityAcc-std()-Z	numeric	-	Standard Deviation of the Z axis - Time Gravity Acceleration
tBodyAccJerk-mean()-X	numeric	-	Mean of the X axis - Time Body Acceleration Jerk
tBodyAccJerk-mean()-Y	numeric	-	Mean of the Y axis - Time Body Acceleration Jerk
tBodyAccJerk-mean()-Z	numeric	-	Mean of the Z axis - Time Body Acceleration Jerk
tBodyAccJerk-std()-X	numeric	-	Standard Deviation of the X axis - Time Body Acceleration Jerk
tBodyAccJerk-std()-Y	numeric	-	Standard Deviation of the Y axis - Time Body Acceleration Jerk

Variable Name	Class/ Data Type	Range/Levels	Description
tBodyAccJerk-std()-Z	numeric	-	Standard Deviation of the Z axis - Time Body Acceleration Jerk
tBodyGyro-mean()-X	numeric	-	Mean of the X axis - Time Body Gyroscope
tBodyGyro-mean()-Y	numeric	-	Mean of the Y axis - Time Body Gyroscope
tBodyGyro-mean()-Z	numeric	-	Mean of the Z axis - Time Body Gyroscope
tBodyGyro-std()-X	numeric	-	Standard Deviation of the X axis - Time Body Gyroscope
tBodyGyro-std()-Y	numeric	-	Standard Deviation of the Y axis - Time Body Gyroscope
tBodyGyro-std()-Z	numeric	-	Standard Deviation of the Z axis - Time Body Gyroscope
tBodyGyroJerk-mean()-X	numeric	-	Mean of the X axis - Time Body Gyroscope Jerk
tBodyGyroJerk-mean()-Y	numeric	-	Mean of the Y axis - Time Body Gyroscope Jerk
tBodyGyroJerk-mean()-Z	numeric	-	Mean of the Z axis - Time Body Gyroscope Jerk
tBodyGyroJerk-std()-X	numeric	-	Standard Deviation of the X axis - Time Body Gyroscope Jerk
tBodyGyroJerk-std()-Y	numeric	-	Standard Deviation of the Y axis - Time Body Gyroscope Jerk
tBodyGyroJerk-std()-Z	numeric	-	Standard Deviation of the Z axis - Time Body Gyroscope Jerk
tBodyAccMag-mean()	numeric	-	Mean- Time Body Acceleration using Euclidien norm
tBodyAccMag-std()	numeric	-	Standard Deviation - Time Body Acceleration using Euclidien norm
tGravityAccMag-mean()	numeric	-	Mean- Time Gravity Acceleration using Euclidien norm
tGravityAccMag-std()	numeric	-	Standard Deviation - Time Gravity Acceleration using Euclidien norm
tBodyAccJerkMag-mean()	numeric	-	Mean- Time Body Acceleration Jerk using Euclidien norm
tBodyAccJerkMag-std()	numeric	-	Standard Deviation - Time Body Acceleration Jerk using Euclidien norm
tBodyGyroMag-mean()	numeric	-	Mean- Time Body Gyroscope using Euclidien norm
tBodyGyroMag-std()	numeric	-	Standard Deviation - Time Body Gyroscope using Euclidien norm

Variable Name	Class/ Data Type	Range/Levels	Description
tBodyGyroJerkMag-mean()	numeric	-	Mean- Time Body Gyroscope Jerk using Euclidien norm
tBodyGyroJerkMag-std()	numeric	-	Standard Deviation - Time Body Gyroscope Jerk using Euclidien norm
fBodyAcc-mean()-X	numeric	-	Mean of X axis - Fast Fourier Transformation - Body Acceleration
fBodyAcc-mean()-Y	numeric	-	Mean of Y axis - Fast Fourier Transformation - Body Acceleration
fBodyAcc-mean()-Z	numeric	-	Mean of Z axis - Fast Fourier Transformation - Body Acceleration
fBodyAcc-std()-X	numeric	-	Standard Deviation of X axis - Fast Fourier Transformation - Body Acceleration
fBodyAcc-std()-Y	numeric	-	Standard Deviation of Y axis - Fast Fourier Transformation - Body Acceleration
fBodyAcc-std()-Z	numeric	-	Standard Deviation of Z axis - Fast Fourier Transformation - Body Acceleration
fBodyAccJerk-mean()-X	numeric	-	Mean of X axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyAccJerk-mean()-Y	numeric	-	Mean of Y axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyAccJerk-mean()-Z	numeric	-	Mean of Z axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyAccJerk-std()-X	numeric	-	Standard Deviation of X axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyAccJerk-std()-Y	numeric	-	Standard Deviation of Y axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyAccJerk-std()-Z	numeric	-	Standard Deviation of Z axis - Fast Fourier Transformation - Body Acceleration Jerk
fBodyGyro-mean()-X	numeric	-	Mean of X axis - Fast Fourier Transformation - Body Gyroscope

Variable Name	Class/ Data Type	Range/Levels	Description
fBodyGyro-mean()-Y	numeric	-	Mean of Y axis - Fast Fourier Transformation - Body Gyroscope
fBodyGyro-mean()-Z	numeric	-	Mean of Z axis - Fast Fourier Transformation - Body Gyroscope
fBodyGyro-std()-X	numeric	-	Standard Deviation of X axis - Fast Fourier Transformation - Body Gyroscope
fBodyGyro-std()-Y	numeric	-	Standard Deviation of Y axis - Fast Fourier Transformation - Body Gyroscope
fBodyGyro-std()-Z	numeric	-	Standard Deviation of Z axis - Fast Fourier Transformation - Body Gyroscope
fBodyAccMag-mean()	numeric	-	Mean - Fast Fourier Transformation - Body Acceleration using Euclidean norm
fBodyAccMag-std()	numeric	-	Standard Deviation - Fast Fourier Transformation - Body Acceleration using Euclidean norm
fBodyBodyAccJerkMag-mean()	numeric	-	Mean - Fast Fourier Transformation - Body Acceleration Jerk using Euclidean norm
fBodyBodyAccJerkMag-std()	numeric	-	Standard Deviation - Fast Fourier Transformation - Body Acceleration Jerk using Euclidean norm
fBodyBodyGyroMag-mean()	numeric	-	Mean - Fast Fourier Transformation - Body Gyroscope using Euclidean norm
fBodyBodyGyroMag-std()	numeric	-	Standard Deviation - Fast Fourier Transformation - Body Gyroscope using Euclidean norm
fBodyBodyGyroJerkMag-mean()	numeric	-	Mean - Fast Fourier Transformation - Body Gyroscope Jerk using Euclidean norm
fBodyBodyGyroJerkMag-std()	numeric	-	Standard Deviation - Fast Fourier Transformation - Body Gyroscope Jerk using Euclidean norm