**CODE BOOK: Getting and Cleaning data course project.**

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| --- | --- | --- | --- | --- |
| Variable Name | Variable Type | Description | range | Example(s) |
| SubjectNumber | Integer | The unique number of the experiment subject | [1,30] | 1, 2, 3 .. |
| tBodyAccmeanX | Double-precision number | Average of the mean body acceleration in the X axis | [-1,1] | 0.265696920582133 |
| tBodyAccmeanY | Double-precision number | Average of the mean body acceleration in the Y axis | [-1,1] | 0.265696920582133 |
| tBodyAccmeanZ | Double-precision number | Average of the mean body acceleration in the Z axis | [-1,1] | 0.265696920582133 |
| tBodyAccstdX | Double-precision number | Average of the standard deviation of body acceleration in the X axis | [-1,1] | 0.265696920582133 |
| tBodyAccstdY | Double-precision number | Average of the standard deviation of body acceleration in the Y axis | [-1,1] | 0.265696920582133 |
| tBodyAccstdZ | Double-precision number | Average of the standard deviation of body acceleration in the Z axis | [-1,1] | 0.265696920582133 |
| tGravityAccmeanX | Double-precision number | Average mean gravity acceleration X axis | [-1,1] | 0.265696920582133 |
| tGravityAccmeanY | Double-precision number | Average mean gravity acceleration Y axis | [-1,1] | 0.265696920582133 |
| tGravityAccmeanZ | Double-precision number | Average mean gravity acceleration Z axis | [-1,1] | 0.265696920582133 |
| tGravityAccstdX | Double-precision number | Average standard deviation gravity acceleration X axis | [-1,1] | 0.265696920582133 |
| tGravityAccstdY | Double-precision number | Average standard deviation gravity acceleration Y axis | [-1,1] | 0.265696920582133 |
| tGravityAccstdZ | Double-precision number | Average standard deviation gravity acceleration Z axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkmeanX | Double-precision number | Average mean body jerk accelearation X axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkmeanY | Double-precision number | Average mean body jerk accelearation Y axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkmeanZ | Double-precision number | Average mean body jerk accelearation Z axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkstdX | Double-precision number | Average standard deviation body jerk acceleration X axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkstdY | Double-precision number | Average standard deviation body jerk acceleration Y axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkstdZ | Double-precision number | Average standard deviation body jerk acceleration Z axis | [-1,1] | 0.265696920582133 |
| tBodyGyromeanX | Double-precision number | Average mean body gyro X axis | [-1,1] | 0.265696920582133 |
| tBodyGyromeanY | Double-precision number | Average mean body gyro Y axis | [-1,1] | 0.265696920582133 |
| tBodyGyromeanZ | Double-precision number | Average mean body gyro Z axis | [-1,1] | 0.265696920582133 |
| tBodyGyrostdX | Double-precision number | Average standard deviation body gyro X axis | [-1,1] | 0.265696920582133 |
| tBodyGyrostdY | Double-precision number | Average standard deviation body gyro Y axis | [-1,1] | 0.265696920582133 |
| tBodyGyrostdZ | Double-precision number | Average standard deviation body gyro Z axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkmeanX | Double-precision number | Average mean body gyro jerk X axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkmeanY | Double-precision number | Average mean body gyro jerk Y axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkmeanZ | Double-precision number | Average mean body gyro jerk Z axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkstdX | Double-precision number | Average standard deviation body gyro jerk X axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkstdY | Double-precision number | Average standard deviation body gyro jerk Y axis | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkstdZ | Double-precision number | Average standard deviation body gyro jerk Z axis | [-1,1] | 0.265696920582133 |
| tBodyAccMagmean | Double-precision number | Average mean body acceleration magnitude X axis | [-1,1] | 0.265696920582133 |
| tBodyAccMagstd | Double-precision number | Average mean body acceleration magnitude Y axis | [-1,1] | 0.265696920582133 |
| tGravityAccMagmean | Double-precision number | Average mean body acceleration magnitude Z axis | [-1,1] | 0.265696920582133 |
| tGravityAccMagstd | Double-precision number | Average standard deviation body acceleration magnitude X axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkMagmean | Double-precision number | Average standard deviation body acceleration magnitude Y axis | [-1,1] | 0.265696920582133 |
| tBodyAccJerkMagstd | Double-precision number | Average standard deviation body acceleration magnitude Z axis | [-1,1] | 0.265696920582133 |
| tBodyGyroMagmean | Double-precision number | Average body gyro magnitude mean | [-1,1] | 0.265696920582133 |
| tBodyGyroMagstd | Double-precision number | Average standard deviation body gyro magnitude | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkMagmean | Double-precision number | Average mean body gyro jerk magnitude | [-1,1] | 0.265696920582133 |
| tBodyGyroJerkMagstd | Double-precision number | Average standard deviation body gyro jerk magnitude | [-1,1] | 0.265696920582133 |
| fBodyAccmeanX | Double-precision number | Average of the mean fbody acceleration in the X axis | [-1,1] | 0.265696920582133 |
| fBodyAccmeanY | Double-precision number | Average of the mean fbody acceleration in the Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccmeanZ | Double-precision number | Average of the mean fbody acceleration in the Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccstdX | Double-precision number | Average of the standard deviation of fbody acceleration in the X axis | [-1,1] | 0.265696920582133 |
| fBodyAccstdY | Double-precision number | Average of the standard deviation of fbody acceleration in the Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccstdZ | Double-precision number | Average of the standard deviation of fbody acceleration in the Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccmeanFreqX | Double-precision number | Average of the mean fbody acceleration frequency in the X axis | [-1,1] | 0.265696920582133 |
| fBodyAccmeanFreqY | Double-precision number | Average of the meanf body acceleration frequency in the Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccmeanFreqZ | Double-precision number | Average of the mean fbody acceleration frequency in the Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanX | Double-precision number | Average of the standard deviation of fbody acceleration frequency in the X axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanY | Double-precision number | Average of the standard deviation of fbody acceleration frequency in the Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanZ | Double-precision number | Average of the standard deviation of fbody acceleration frequency in the Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkstdX | Double-precision number | Average fbody acceleration jerk standard deviation X axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkstdY | Double-precision number | Average fbody acceleration jerk standard deviation Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkstdZ | Double-precision number | Average fbody acceleration jerk standard deviation Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanFreqX | Double-precision number | Average fbody acceleration jerk mean frequency X axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanFreqY | Double-precision number | Average fbody acceleration jerk mean frequency Y axis | [-1,1] | 0.265696920582133 |
| fBodyAccJerkmeanFreqZ | Double-precision number | Average fbody acceleration jerk mean frequency Z axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanX | Double-precision number | Average fbody gyro mean X axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanY | Double-precision number | Average fbody gyro mean Y axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanZ | Double-precision number | Average fbody gyro mean Z axis | [-1,1] | 0.265696920582133 |
| fBodyGyrostdX | Double-precision number | Average fbody gyro standard deviation X axis | [-1,1] | 0.265696920582133 |
| fBodyGyrostdY | Double-precision number | Average fbody gyro standard deviation Y axis | [-1,1] | 0.265696920582133 |
| fBodyGyrostdZ | Double-precision number | Average fbody gyro standard deviation Z axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanFreqX | Double-precision number | Average fbody gyro mean frequency X axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanFreqY | Double-precision number | Average fbody gyro mean frequency Y axis | [-1,1] | 0.265696920582133 |
| fBodyGyromeanFreqZ | Double-precision number | Average fbody gyro mean frequency Z axis | [-1,1] | 0.265696920582133 |
| fBodyAccMagmean | Double-precision number | Average fbody acceleration magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyAccMagstd | Double-precision number | Average fbody acceleration magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyAccMagmeanFreq | Double-precision number | Average fbody acceleration magnitude mean frequency | [-1,1] | 0.265696920582133 |
| fBodyBodyAccJerkMagmean | Double-precision number | Average fbody body acceleration jeark magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyBodyAccJerkMagstd | Double-precision number | Average fbody body acceleration jerk magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyBodyAccJerkMagmeanFreq | Double-precision number | Average fbody body acceleration jerk magnitude mean frequency | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroMagmean | Double-precision number | Average fbody body gyro magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroMagstd | Double-precision number | Average fbody body gyro magnitude standard deviation | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroMagmeanFreq | Double-precision number | Average fbody body gyro magnitude mean frequency | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroJerkMagmean | Double-precision number | Average fbody body gyro jerk magnitude mean | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroJerkMagstd | Double-precision number | Average fbody body gyro jerk magnituge standard deviation | [-1,1] | 0.265696920582133 |
| fBodyBodyGyroJerkMagmeanFreq | Double-precision number | Average fbody body gyro jerk magnitude mean frequency | [-1,1] | 0.265696920582133 |
| angletBodyAccMeangravity | Double-precision number | Average angular body acceleration mean gravity | [-1,1] | 0.265696920582133 |
| angletBodyAccJerkMeangravityMean | Double-precision number | Average angular body acceleration jeark mean gravity | [-1,1] | 0.265696920582133 |
| angletBodyGyroMeangravityMean | Double-precision number | Average angular body gyro mean gravity mean | [-1,1] | 0.265696920582133 |
| angletBodyGyroJerkMeangravityMean | Double-precision number | Average angular body gyro jerk mean gravity mean | [-1,1] | 0.265696920582133 |
| angleXgravityMean | Double-precision number | Average angular gravity mean X axis | [-1,1] | 0.265696920582133 |
| angleYgravityMean | Double-precision number | Average angular gravity mean Y axis | [-1,1] | 0.265696920582133 |
| angleZgravityMean | Double-precision number | Average angular gravity mean Z axis | [-1,1] | 0.265696920582133 |
| yValue | Double-precision number | Y-Value | [-1,1] | 0.265696920582133 |