CODE BOOK: Getting and Cleaning data course project.

| VARIABLE NAME | VARIABLE TYPE | DESCRIPTION | RANGE | EXAMPLE(S) |
|-----------------------|--------------------------------|--|--------|-----------------------|
| SUBJECTNUMB ER | Integer | The unique number of the experiment subject | [1,30] | 1, 2, 3 |
| TBODYACCME ANX | Double- precision number | Average of the mean body acceleration in the X axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCME ANY | Double- precision number | Average of the mean body acceleration in the Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCME ANZ | Double- precision number | Average of the mean body acceleration in the Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCSTD X | Double- precision number | Average of the standard deviation of body acceleration in the X axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCSTD Y | Double- precision number | Average of the standard deviation of body acceleration in the Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCSTD Z | Double- precision number | Average of the standard deviation of body acceleration in the Z axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC MEANX | Double- precision number | Average mean gravity acceleration X axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC MEANY | Double- precision number | Average mean gravity acceleration Y axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC MEANZ | Double- precision number | Average mean gravity acceleration Z axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC STDX | Double- precision number | Average standard deviation gravity acceleration X axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC STDY | Double- precision number | Average standard deviation gravity acceleration Y axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC STDZ | Double- precision number | Average standard deviation gravity acceleration Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KMEANX | Double- precision number | Average mean body jerk accelearation X axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KMEANY | Double- precision number | Average mean body jerk accelearation Y axis | [-1,1] | 0.26569692058 2133 |

| TBODYACCJER KMEANZ | Double- precision number | Average mean body jerk accelearation Z axis | [-1,1] | 0.26569692058 2133 |
|------------------------|--------------------------------|--|--------|-----------------------|
| TBODYACCJER KSTDX | Double- precision number | Average standard deviation body jerk acceleration X axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KSTDY | Double- precision number | Average standard deviation body jerk acceleration Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KSTDZ | Double- precision number | Average standard deviation body jerk acceleration Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROM EANX | Double- precision number | Average mean body gyro X axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROM EANY | Double- precision number | Average mean body gyro Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROM EANZ | Double- precision number | Average mean body gyro Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROS TDX | Double- precision number | Average standard deviation body gyro X axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROS TDY | Double- precision number | Average standard deviation body gyro Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROS TDZ | Double- precision number | Average standard deviation body gyro Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKMEANX | Double- precision number | Average mean body gyro jerk X axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKMEANY | Double- precision number | Average mean body gyro jerk Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKMEANZ | Double- precision number | Average mean body gyro jerk Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKSTDX | Double- precision number | Average standard deviation body gyro jerk X axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKSTDY | Double- precision number | Average standard deviation body gyro jerk Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKSTDZ | Double- precision number | Average standard deviation body gyro jerk Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCMA GMEAN | Double- precision number | Average mean body acceleration magnitude X axis | [-1,1] | 0.26569692058 2133 |

| TBODYACCMA GSTD | Double- precision number | Average mean body acceleration magnitude Y axis | [-1,1] | 0.26569692058 2133 |
|--------------------------|--------------------------------|---|--------|-----------------------|
| TGRAVITYACC MAGMEAN | Double- precision number | Average mean body acceleration magnitude Z axis | [-1,1] | 0.26569692058 2133 |
| TGRAVITYACC MAGSTD | Double- precision number | Average standard deviation body acceleration magnitude X axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KMAGMEAN | Double- precision number | Average standard deviation body acceleration magnitude Y axis | [-1,1] | 0.26569692058 2133 |
| TBODYACCJER KMAGSTD | Double- precision number | Average standard deviation body acceleration magnitude Z axis | [-1,1] | 0.26569692058 2133 |
| TBODYGYROM AGMEAN | Double- precision number | Average body gyro magnitude mean | [-1,1] | 0.26569692058 2133 |
| TBODYGYROM AGSTD | Double- precision number | Average standard deviation body gyro magnitude | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKMAGMEAN | Double- precision number | Average mean body gyro jerk magnitude | [-1,1] | 0.26569692058 2133 |
| TBODYGYROJ ERKMAGSTD | Double- precision number | Average standard deviation body gyro jerk magnitude | [-1,1] | 0.26569692058 2133 |
| FBODYACCME ANX | Double- precision number | Average of the mean fbody acceleration in the X axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCME ANY | Double- precision number | Average of the mean fbody acceleration in the Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCME ANZ | Double- precision number | Average of the mean fbody acceleration in the Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCSTD X | Double- precision number | Average of the standard deviation of fbody acceleration in the X axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCSTD Y | Double- precision number | Average of the standard deviation of fbody acceleration in the Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCSTD Z | Double- precision number | Average of the standard deviation of fbody acceleration in the Z axis | [-1,1] | 0.26569692058 2133 |
| | | | | |

| FBODYACCME ANFREQX | Double- precision number | Average of the mean fbody acceleration frequency in the X axis | [-1,1] | 0.26569692058 2133 |
|---------------------------|--------------------------------|---|--------|-----------------------|
| FBODYACCME ANFREQY | Double- precision number | Average of the meanf body acceleration frequency in the Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCME ANFREQZ | Double- precision number | Average of the mean fbody acceleration frequency in the Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANX | Double- precision number | Average of the standard deviation of fbody acceleration frequency in the X axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANY | Double- precision number | Average of the standard deviation of fbody acceleration frequency in the Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANZ | Double- precision number | Average of the standard deviation of fbody acceleration frequency in the Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KSTDX | Double- precision number | Average fbody acceleration jerk standard deviation X axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KSTDY | Double- precision number | Average fbody acceleration jerk standard deviation Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KSTDZ | Double- precision number | Average fbody acceleration jerk standard deviation Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANFREQX | Double- precision number | Average fbody acceleration jerk mean frequency X axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANFREQY | Double- precision number | Average fbody acceleration jerk mean frequency Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCJER KMEANFREQZ | Double- precision number | Average fbody acceleration jerk mean frequency Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANX | Double- precision number | Average fbody gyro mean X axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANY | Double- precision number | Average fbody gyro mean Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANZ | Double- precision number | Average fbody gyro mean Z axis | [-1,1] | 0.26569692058 2133 |

| FBODYGYROS TDX | Double- precision number | Average fbody gyro standard deviation X axis | [-1,1] | 0.26569692058 2133 |
|-------------------------------------|--------------------------------|--|--------|-----------------------|
| FBODYGYROS TDY | Double- precision number | Average fbody gyro standard deviation Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROS TDZ | Double- precision number | Average fbody gyro standard deviation Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANFREQX | Double- precision number | Average fbody gyro mean frequency X axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANFREQY | Double- precision number | Average fbody gyro mean frequency Y axis | [-1,1] | 0.26569692058 2133 |
| FBODYGYROM EANFREQZ | Double- precision number | Average fbody gyro mean frequency Z axis | [-1,1] | 0.26569692058 2133 |
| FBODYACCMA GMEAN | Double- precision number | Average fbody acceleration magnitude mean | [-1,1] | 0.26569692058 2133 |
| FBODYACCMA GSTD | Double- precision number | Average fbody acceleration magnitude mean | [-1,1] | 0.26569692058 2133 |
| FBODYACCMA GMEANFREQ | Double- precision number | Average fbody acceleration magnitude mean frequency | [-1,1] | 0.26569692058 2133 |
| FBODYBODYA CCJERKMAGM EAN | Double- precision number | Average fbody body acceleration jeark magnitude mean | [-1,1] | 0.26569692058 2133 |
| FBODYBODYA CCJERKMAGS TD | Double- precision number | Average fbody body acceleration jerk magnitude mean | [-1,1] | 0.26569692058 2133 |
| FBODYBODYA CCJERKMAGM EANFREQ | Double- precision number | Average fbody body acceleration jerk magnitude mean frequency | [-1,1] | 0.26569692058 2133 |
| FBODYBODYG YROMAGMEA N | Double- precision number | Average fbody body gyro magnitude mean | [-1,1] | 0.26569692058 2133 |
| FBODYBODYG YROMAGSTD | Double- precision number | Average fbody body gyro magnitude standard deviation | [-1,1] | 0.26569692058 2133 |
| FBODYBODYG YROMAGMEA NFREQ | Double- precision number | Average fbody body gyro magnitude mean frequency | [-1,1] | 0.26569692058 2133 |
| FBODYBODYG YROJERKMAG MEAN | Double- precision number | Average fbody body gyro jerk magnitude mean | [-1,1] | 0.26569692058 2133 |

| FBODYBODYG YROJERKMAG STD | Double- precision number | Average fbody body gyro jerk magnituge standard deviation | [-1,1] | 0.26569692058 2133 |
|---|--------------------------------|---|--------|-----------------------|
| FBODYBODYG YROJERKMAG MEANFREQ | Double- precision number | Average fbody body gyro jerk magnitude mean frequency | [-1,1] | 0.26569692058 2133 |
| ANGLETBODY ACCMEANGRA VITY | Double- precision number | Average angular body acceleration mean gravity | [-1,1] | 0.26569692058 2133 |
| ANGLETBODY ACCJERKMEA NGRAVITYME AN | Double- precision number | Average angular body acceleration jeark mean gravity | [-1,1] | 0.26569692058 2133 |
| ANGLETBODY GYROMEANGR AVITYMEAN | Double- precision number | Average angular body gyro mean gravity mean | [-1,1] | 0.26569692058 2133 |
| ANGLETBODY GYROJERKME ANGRAVITYM EAN | Double- precision number | Average angular body gyro jerk mean gravity mean | [-1,1] | 0.26569692058 2133 |
| ANGLEXGRAVI TYMEAN | Double- precision number | Average angular gravity mean X axis | [-1,1] | 0.26569692058 2133 |
| ANGLEYGRAVI TYMEAN | Double- precision number | Average angular gravity mean Y axis | [-1,1] | 0.26569692058 2133 |
| ANGLEZGRAVI TYMEAN | Double- precision number | Average angular gravity mean Z axis | [-1,1] | 0.26569692058 2133 |
| YVALUE | Double- precision number | Y-Value | [-1,1] | 0.26569692058 2133 |