## **Codebook for tidy UCI HAR Dataset**

## tidy data

```
##
      subjectID
                                                tBodyAcc.mean...X
                                   activity
##
    Min.
          : 1.00
                    LAYING
                                        :1944
                                                Min.
                                                       :-1.0000
##
    1st Qu.: 9.00
                    SITTING
                                        :1777
                                                1st Qu.: 0.2626
##
    Median :17.00
                                        :1906
                                                Median : 0.2772
                    STANDING
##
    Mean
           :16.15
                                                Mean
                                                      : 0.2743
                    WALKING
                                        :1722
##
    3rd Qu.:24.00
                    WALKING DOWNSTAIRS:1406
                                                3rd Qu.: 0.2884
##
    Max.
           :30.00
                    WALKING UPSTAIRS
                                       :1544
                                                Max.
                                                       : 1.0000
##
    tBodyAcc.mean...Y
                       tBodyAcc.mean...Z
                                           tBodyAcc.std...X
##
    Min.
           :-1.00000
                        Min.
                               :-1.00000
                                            Min.
                                                   :-1.0000
##
    1st Qu.:-0.02490
                        1st Qu.:-0.12102
                                            1st Qu.:-0.9924
##
    Median :-0.01716
                        Median :-0.10860
                                            Median :-0.9430
##
    Mean
           :-0.01774
                        Mean
                               :-0.10892
                                            Mean
                                                   :-0.6078
##
    3rd Qu.:-0.01062
                        3rd Qu.:-0.09759
                                            3rd Qu.:-0.2503
##
    Max.
           : 1.00000
                        Max.
                               : 1.00000
                                            Max.
                                                  : 1.0000
##
    tBodyAcc.std...Y
                        tBodyAcc.std...Z
                                           tGravityAcc.mean...X
##
    Min.
                        Min.
           :-1.00000
                               :-1.0000
                                           Min.
                                                  :-1.0000
##
                                           1st Qu.: 0.8117
    1st Qu.:-0.97699
                        1st Qu.:-0.9791
##
    Median :-0.83503
                        Median :-0.8508
                                           Median : 0.9218
##
    Mean
           :-0.51019
                        Mean
                               :-0.6131
                                           Mean
                                                  : 0.6692
##
    3rd Qu.:-0.05734
                        3rd Qu.:-0.2787
                                           3rd Qu.: 0.9547
##
                               : 1.0000
           : 1.00000
                        Max.
                                           Max.
                                                  : 1.0000
##
    tGravityAcc.mean...Y tGravityAcc.mean...Z tGravityAcc.std...X
##
    Min.
           :-1.000000
                          Min.
                                 :-1.00000
                                                Min.
                                                       :-1.0000
##
    1st Qu.:-0.242943
                          1st Qu.:-0.11671
                                                1st Qu.:-0.9949
##
    Median :-0.143551
                          Median : 0.03680
                                                Median :-0.9819
##
    Mean
           : 0.004039
                                 : 0.09215
                          Mean
                                                Mean
                                                       :-0.9652
##
    3rd Ou.: 0.118905
                          3rd Qu.: 0.21621
                                                3rd Qu.:-0.9615
##
           : 1.000000
                          Max.
                                 : 1.00000
                                                Max.
                                                       : 1.0000
##
    tGravityAcc.std...Y tGravityAcc.std...Z tBodyAccJerk.mean...X
##
    Min.
           :-1.0000
                         Min.
                                :-1.0000
                                              Min.
                                                     :-1.00000
##
    1st Qu.:-0.9913
                         1st Qu.:-0.9866
                                              1st Qu.: 0.06298
##
    Median :-0.9759
                         Median :-0.9665
                                              Median : 0.07597
##
    Mean
           :-0.9544
                         Mean
                                :-0.9389
                                              Mean
                                                     : 0.07894
##
    3rd Qu.:-0.9464
                                              3rd Qu.: 0.09131
                         3rd Qu.:-0.9296
##
                                              Max.
    Max.
           : 1.0000
                         Max.
                                : 1.0000
                                                     : 1.00000
##
    tBodyAccJerk.mean...Y tBodyAccJerk.mean...Z tBodyAccJerk.std...X
                                                  Min.
##
           :-1.000000
                           Min.
                                  :-1.000000
                                                         :-1.0000
##
    1st Qu.:-0.018555
                           1st Qu.:-0.031552
                                                  1st Qu.:-0.9913
##
    Median : 0.010753
                           Median :-0.001159
                                                  Median :-0.9513
##
    Mean
           : 0.007948
                           Mean
                                  :-0.004675
                                                  Mean
                                                         :-0.6398
##
    3rd Qu.: 0.033538
                           3rd Qu.: 0.024578
                                                  3rd Qu.:-0.2912
##
    Max.
          : 1.000000
                           Max.
                                  : 1.000000
                                                  Max.
                                                         : 1.0000
##
    tBodyAccJerk.std...Y tBodyAccJerk.std...Z tBodyGyro.mean...X
    Min. :-1.0000
                          Min. :-1.0000
                                                Min. :-1.00000
```

```
1st Ou.:-0.9850
                                                1st Ou.:-0.04579
                          1st Ou.:-0.9892
##
    Median :-0.9250
                          Median :-0.9543
                                                Median :-0.02776
##
    Mean
           :-0.6080
                          Mean
                                 :-0.7628
                                                Mean
                                                       :-0.03098
##
    3rd Qu.:-0.2218
                          3rd Qu.:-0.5485
                                                3rd Qu.:-0.01058
##
    Max.
           : 1.0000
                          Max.
                                 : 1.0000
                                                Max.
                                                       : 1.00000
##
    tBodyGyro.mean...Y tBodyGyro.mean...Z tBodyGyro.std...X tBodyGyro.std...Y
##
                                           Min.
                                                  :-1.0000
                                                              Min.
           :-1.00000
                        Min.
                              :-1.00000
                                                                     :-1.0000
##
    1st Qu.:-0.10399
                        1st Qu.: 0.06485
                                            1st Qu.:-0.9872
                                                              1st Qu.:-0.9819
##
    Median :-0.07477
                        Median : 0.08626
                                           Median :-0.9016
                                                              Median :-0.9106
##
    Mean
                        Mean
                               : 0.08836
                                            Mean
                                                   :-0.7212
                                                              Mean
           :-0.07472
                                                                      :-0.6827
    3rd Qu.:-0.05110
                        3rd Qu.: 0.11044
                                                              3rd Qu.:-0.4461
##
                                            3rd Qu.:-0.4822
                                                   : 1.0000
                                                              Max. : 1.0000
##
    Max.
           : 1.00000
                        Max.
                               : 1.00000
                                           Max.
##
    tBodyGyro.std...Z tBodyGyroJerk.mean...X tBodyGyroJerk.mean...Y
##
    Min.
           :-1.0000
                       Min.
                              :-1.00000
                                               Min.
                                                      :-1.00000
##
    1st Qu.:-0.9850
                       1st Qu.:-0.11723
                                               1st Qu.:-0.05868
##
    Median :-0.8819
                       Median :-0.09824
                                               Median :-0.04056
##
    Mean
           :-0.6537
                       Mean
                              :-0.09671
                                               Mean
                                                      :-0.04232
##
    3rd Qu.:-0.3379
                       3rd Qu.:-0.07930
                                               3rd Qu.:-0.02521
                              : 1.00000
##
    Max.
           : 1.0000
                       Max.
                                               Max.
                                                      : 1.00000
##
    tBodyGyroJerk.mean...Z tBodyGyroJerk.std...X tBodyGyroJerk.std...Y
##
                                   :-1.0000
    Min.
           :-1.00000
                            Min.
                                                   Min.
                                                          :-1.0000
##
    1st Qu.:-0.07936
                            1st Qu.:-0.9907
                                                   1st Qu.:-0.9922
##
    Median :-0.05455
                            Median :-0.9348
                                                   Median :-0.9548
##
           :-0.05483
                                   :-0.7313
    Mean
                            Mean
                                                   Mean
                                                          :-0.7861
##
    3rd Qu.:-0.03168
                            3rd Qu.:-0.4865
                                                   3rd Qu.:-0.6268
##
    Max.
           : 1.00000
                            Max.
                                   : 1.0000
                                                   Max.
                                                          : 1.0000
##
    tBodyGyroJerk.std...Z tBodyAccMag.mean.. tBodyAccMag.std..
##
    Min.
           :-1.0000
                           Min.
                                  :-1.0000
                                               Min.
                                                      :-1.0000
##
    1st Qu.:-0.9926
                           1st Qu.:-0.9819
                                               1st Qu.:-0.9822
##
    Median :-0.9503
                           Median :-0.8746
                                               Median :-0.8437
##
    Mean
           :-0.7399
                           Mean
                                  :-0.5482
                                               Mean
                                                      :-0.5912
##
    3rd Qu.:-0.5097
                           3rd Qu.:-0.1201
                                               3rd Qu.:-0.2423
##
    Max.
           : 1.0000
                           Max.
                                  : 1.0000
                                               Max.
                                                      : 1.0000
##
    tGravityAccMag.mean..
                           tGravityAccMag.std.. tBodyAccJerkMag.mean..
##
    Min.
           :-1.0000
                           Min.
                                  :-1.0000
                                                 Min.
                                                        :-1.0000
##
    1st Qu.:-0.9819
                           1st Qu.:-0.9822
                                                 1st Qu.:-0.9896
##
    Median :-0.8746
                           Median :-0.8437
                                                 Median :-0.9481
##
    Mean
           :-0.5482
                           Mean
                                  :-0.5912
                                                 Mean
                                                        :-0.6494
##
    3rd Qu.:-0.1201
                           3rd Qu.:-0.2423
                                                 3rd Qu.:-0.2956
##
    Max.
           : 1.0000
                           Max.
                                  : 1.0000
                                                 Max.
                                                        : 1.0000
##
                           tBodyGyroMag.mean..
                                                tBodyGyroMag.std..
    tBodyAccJerkMag.std..
##
    Min.
           :-1.0000
                           Min.
                                  :-1.0000
                                                Min.
                                                       :-1.0000
##
    1st Qu.:-0.9907
                           1st Qu.:-0.9781
                                                1st Qu.:-0.9775
##
    Median :-0.9288
                           Median :-0.8223
                                                Median :-0.8259
##
    Mean
           :-0.6278
                           Mean
                                  :-0.6052
                                                Mean
                                                       :-0.6625
##
    3rd Qu.:-0.2733
                           3rd Qu.:-0.2454
                                                3rd Qu.:-0.3940
##
           : 1.0000
                                  : 1.0000
                                                Max.
                                                       : 1.0000
    Max.
                           Max.
##
    tBodyGyroJerkMag.mean.. tBodyGyroJerkMag.std.. fBodyAcc.mean...X
##
    Min.
           :-1.0000
                             Min.
                                    :-1.0000
                                                     Min.
                                                            :-1.0000
    1st Qu.:-0.9923
                             1st Qu.:-0.9922
                                                     1st Qu.:-0.9913
```

```
Median :-0.9559
                             Median :-0.9403
                                                     Median :-0.9456
##
    Mean
           :-0.7621
                             Mean
                                    :-0.7780
                                                     Mean
                                                            :-0.6228
##
    3rd Qu.:-0.5499
                             3rd Qu.:-0.6093
                                                     3rd Qu.:-0.2646
##
    Max.
           : 1.0000
                             Max.
                                    : 1.0000
                                                     Max.
                                                            : 1.0000
##
    fBodyAcc.mean...Y fBodyAcc.mean...Z fBodyAcc.std...X fBodyAcc.std...Y
##
    Min.
           :-1.0000
                      Min.
                              :-1.0000
                                         Min.
                                                 :-1.0000
                                                            Min.
                                                                   :-1.00000
                                                            1st Qu.:-0.97689
##
    1st Qu.:-0.9792
                      1st Qu.:-0.9832
                                         1st Qu.:-0.9929
##
    Median :-0.8643
                      Median :-0.8954
                                         Median :-0.9416
                                                            Median :-0.83261
    Mean
           :-0.5375
                      Mean
                              :-0.6650
                                         Mean
                                                 :-0.6034
                                                            Mean
                                                                   :-0.52842
##
    3rd Qu.:-0.1032
                       3rd Qu.:-0.3662
                                         3rd Qu.:-0.2493
                                                            3rd Qu.:-0.09216
##
    Max.
           : 1.0000
                      Max.
                              : 1.0000
                                         Max.
                                                : 1.0000
                                                            Max.
                                                                  : 1.00000
    fBodyAcc.std...Z
##
                      fBodyAccJerk.mean...X fBodyAccJerk.mean...Y
##
                                                     :-1.0000
    Min.
           :-1.0000
                      Min.
                              :-1.0000
                                             Min.
##
    1st Qu.:-0.9780
                      1st Qu.:-0.9912
                                              1st Qu.:-0.9848
##
    Median :-0.8398
                      Median :-0.9516
                                             Median :-0.9257
    Mean
           :-0.6179
                      Mean
                             :-0.6567
                                             Mean
                                                     :-0.6290
##
    3rd Qu.:-0.3023
                       3rd Qu.:-0.3270
                                              3rd Qu.:-0.2638
##
    Max.
           : 1.0000
                      Max.
                              : 1.0000
                                             Max.
                                                     : 1.0000
##
    fBodyAccJerk.mean...Z fBodyAccJerk.std...X fBodyAccJerk.std...Y
                                                Min.
##
    Min.
           :-1.0000
                           Min.
                                  :-1.0000
                                                       :-1.0000
##
    1st Qu.:-0.9873
                           1st Qu.:-0.9920
                                                1st Qu.:-0.9865
##
    Median :-0.9475
                           Median :-0.9562
                                                Median :-0.9280
##
    Mean
           :-0.7436
                           Mean
                                  :-0.6550
                                                Mean
                                                        :-0.6122
##
    3rd Qu.:-0.5133
                           3rd Qu.:-0.3203
                                                3rd Qu.:-0.2361
    Max.
           : 1.0000
                           Max.
                                  : 1.0000
                                                        : 1.0000
                                                Max.
##
    fBodyAccJerk.std...Z fBodyGyro.mean...X fBodyGyro.mean...Y
##
    Min.
           :-1.0000
                         Min.
                                 :-1.0000
                                             Min. :-1.0000
##
    1st Qu.:-0.9895
                         1st Qu.:-0.9853
                                              1st Qu.:-0.9847
##
    Median :-0.9590
                         Median :-0.8917
                                             Median :-0.9197
##
           :-0.7809
                                 :-0.6721
                                             Mean
                                                     :-0.7062
    Mean
                         Mean
                                              3rd Qu.:-0.4735
##
    3rd Qu.:-0.5903
                         3rd Qu.:-0.3837
##
                                 : 1.0000
                                                     : 1.0000
           : 1.0000
                         Max.
                                             Max.
##
    fBodyGyro.mean...Z fBodyGyro.std...X fBodyGyro.std...Y fBodyGyro.std...Z
##
    Min.
           :-1.0000
                       Min.
                              :-1.0000
                                          Min.
                                                :-1.0000
                                                             Min.
                                                                    :-1.0000
##
    1st Qu.:-0.9851
                        1st Qu.:-0.9881
                                          1st Qu.:-0.9808
                                                             1st Qu.:-0.9862
                       Median :-0.9053
##
    Median :-0.8877
                                          Median :-0.9061
                                                             Median :-0.8915
##
    Mean
           :-0.6442
                       Mean
                               :-0.7386
                                          Mean
                                                  :-0.6742
                                                             Mean
                                                                    :-0.6904
##
    3rd Qu.:-0.3225
                        3rd Qu.:-0.5225
                                          3rd Qu.:-0.4385
                                                             3rd Qu.:-0.4168
##
    Max.
           : 1.0000
                       Max.
                               : 1.0000
                                          Max.
                                                 : 1.0000
                                                             Max.
                                                                    : 1.0000
                       fBodyAccMag.std.. fBodyBodyAccJerkMag.mean..
##
    fBodyAccMag.mean..
    Min.
           :-1.0000
                       Min.
                               :-1.0000
                                          Min.
                                                  :-1.0000
##
    1st Qu.:-0.9847
                        1st Qu.:-0.9829
                                          1st Ou.:-0.9898
    Median :-0.8755
                       Median :-0.8547
                                          Median :-0.9290
##
    Mean
           :-0.5860
                       Mean
                               :-0.6595
                                          Mean
                                                  :-0.6208
    3rd Qu.:-0.2173
##
                        3rd Qu.:-0.3823
                                          3rd Ou.:-0.2600
                               : 1.0000
##
    Max.
           : 1.0000
                       Max.
                                          Max.
                                                  : 1.0000
##
    fBodyBodyAccJerkMag.std.. fBodyBodyGyroMag.mean.. fBodyBodyGyroMag.std..
##
    Min. :-1.0000
                               Min.
                                      :-1.0000
                                                        Min. :-1.0000
##
    1st Qu.:-0.9907
                               1st Qu.:-0.9825
                                                        1st Qu.:-0.9781
    Median :-0.9255
                               Median :-0.8756
                                                        Median :-0.8275
```

```
Mean :-0.6401
                              Mean :-0.6974
                                                       Mean
                                                              :-0.7000
##
    3rd Qu.:-0.3082
                              3rd Qu.:-0.4514
                                                       3rd Qu.:-0.4713
##
   Max.
           : 1.0000
                              Max.
                                     : 1.0000
                                                       Max.
                                                              : 1.0000
##
    fBodyBodyGyroJerkMag.mean.. fBodyBodyGyroJerkMag.std..
                                Min.
##
   Min.
           :-1.0000
                                       :-1.0000
##
    1st Qu.:-0.9921
                                1st Qu.:-0.9926
   Median :-0.9453
                                Median :-0.9382
##
   Mean
           :-0.7798
                                Mean
                                       :-0.7922
    3rd Qu.:-0.6122
                                3rd Qu.:-0.6437
                                Max. : 1.0000
##
   Max. : 1.0000
```

## tidy data aggregated

```
##
      subjectID
                                 activity
                                           tBodyAcc.mean...X
##
   Min.
         : 1.0
                   LAYING
                                     :30
                                           Min.
                                                 :0.2216
##
   1st Qu.: 8.0
                   SITTING
                                     :30
                                           1st Qu.:0.2712
##
   Median :15.5
                                     :30
                                           Median :0.2770
                  STANDING
##
   Mean
          :15.5
                  WALKING
                                     :30
                                           Mean
                                                  :0.2743
##
   3rd Qu.:23.0
                  WALKING_DOWNSTAIRS:30
                                           3rd Qu.:0.2800
   Max.
           :30.0
                  WALKING UPSTAIRS :30
                                           Max.
                                                 :0.3015
##
   tBodyAcc.mean...Y
                        tBodyAcc.mean...Z
                                          tBodyAcc.std...X
##
   Min.
           :-0.040514
                        Min.
                               :-0.15251
                                           Min.
                                                 :-0.9961
   1st Qu.:-0.020022
##
                        1st Qu.:-0.11207
                                           1st Qu.:-0.9799
##
   Median :-0.017262
                        Median :-0.10819
                                           Median :-0.7526
##
   Mean
          :-0.017876
                        Mean
                               :-0.10916
                                           Mean
                                                 :-0.5577
##
   3rd Qu.:-0.014936
                        3rd Qu.:-0.10443
                                           3rd Qu.:-0.1984
##
   Max.
          :-0.001308
                        Max.
                               :-0.07538
                                           Max.
                                                 : 0.6269
##
   tBodyAcc.std...Y
                       tBodyAcc.std...Z tGravityAcc.mean...X
##
   Min.
          :-0.99024
                       Min.
                             :-0.9877
                                         Min.
                                               :-0.6800
                                         1st Qu.: 0.8376
##
   1st Ou.:-0.94205
                       1st Qu.:-0.9498
##
   Median :-0.50897
                       Median :-0.6518
                                         Median : 0.9208
##
                                         Mean
                                                : 0.6975
   Mean
           :-0.46046
                       Mean
                              :-0.5756
                                         3rd Qu.: 0.9425
##
   3rd Qu.:-0.03077
                       3rd Qu.:-0.2306
##
   Max.
          : 0.61694
                       Max.
                             : 0.6090
                                        Max.
                                               : 0.9745
##
   tGravityAcc.mean...Y tGravityAcc.mean...Z tGravityAcc.std...X
##
   Min.
          :-0.47989
                         Min.
                               :-0.49509
                                              Min.
                                                    :-0.9968
##
   1st Qu.:-0.23319
                         1st Qu.:-0.11726
                                              1st Qu.:-0.9825
##
   Median :-0.12782
                         Median : 0.02384
                                              Median :-0.9695
##
   Mean
           :-0.01621
                         Mean
                                : 0.07413
                                              Mean
                                                     :-0.9638
##
   3rd Qu.: 0.08773
                         3rd Qu.: 0.14946
                                              3rd Qu.:-0.9509
##
   Max.
           : 0.95659
                         Max.
                                : 0.95787
                                              Max.
                                                     :-0.8296
##
   tGravityAcc.std...Y tGravityAcc.std...Z tBodyAccJerk.mean...X
##
   Min.
          :-0.9942
                        Min.
                              :-0.9910
                                            Min.
                                                   :0.04269
   1st Qu.:-0.9711
##
                        1st Qu.:-0.9605
                                            1st Qu.:0.07396
                        Median :-0.9450
                                            Median :0.07640
##
   Median :-0.9590
##
   Mean
           :-0.9524
                        Mean
                               :-0.9364
                                            Mean
                                                   :0.07947
##
   3rd Ou.:-0.9370
                        3rd Ou.:-0.9180
                                            3rd Ou.:0.08330
##
   Max.
                                            Max.
                                                   :0.13019
           :-0.6436
                        Max.
                               :-0.6102
##
   tBodyAccJerk.mean...Y tBodyAccJerk.mean...Z tBodyAccJerk.std...X
##
   Min.
           :-0.0386872
                          Min.
                                 :-0.067458
                                                Min.
                                                       :-0.9946
```

```
Median : 0.0094698
                          Median :-0.003861
                                                 Median :-0.8104
                                                         :-0.5949
##
    Mean
           : 0.0075652
                          Mean
                                  :-0.004953
                                                 Mean
##
    3rd Qu.: 0.0134008
                          3rd Qu.: 0.001958
                                                 3rd Qu.:-0.2233
##
    Max.
          : 0.0568186
                          Max.
                                  : 0.038053
                                                 Max.
                                                         : 0.5443
##
    tBodyAccJerk.std...Y tBodyAccJerk.std...Z tBodyGyro.mean...X
##
    Min.
           :-0.9895
                         Min.
                                 :-0.99329
                                               Min.
                                                       :-0.20578
    1st Qu.:-0.9724
                         1st Qu.:-0.98266
                                               1st Qu.:-0.04712
##
##
    Median :-0.7756
                         Median :-0.88366
                                               Median :-0.02871
##
           :-0.5654
                         Mean
                                 :-0.73596
                                               Mean
                                                       :-0.03244
##
    3rd Qu.:-0.1483
                          3rd Qu.:-0.51212
                                               3rd Qu.:-0.01676
##
    Max.
           : 0.3553
                         Max.
                                 : 0.03102
                                               Max.
                                                      : 0.19270
    tBodyGyro.mean...Y tBodyGyro.mean...Z tBodyGyro.std...X tBodyGyro.std...Y
##
##
                       Min.
                               :-0.07245
                                           Min.
                                                   :-0.9943
                                                              Min.
    Min.
           :-0.20421
                                                                     :-0.9942
                        1st Qu.: 0.07475
##
    1st Qu.:-0.08955
                                           1st Qu.:-0.9735
                                                              1st Qu.:-0.9629
##
    Median :-0.07318
                       Median : 0.08512
                                           Median :-0.7890
                                                              Median :-0.8017
    Mean
           :-0.07426
                       Mean : 0.08744
                                           Mean
                                                  :-0.6916
                                                              Mean :-0.6533
##
    3rd Qu.:-0.06113
                        3rd Qu.: 0.10177
                                           3rd Qu.:-0.4414
                                                              3rd Qu.:-0.4196
##
           : 0.02747
                       Max.
                               : 0.17910
                                                              Max.
    Max.
                                           Max.
                                                   : 0.2677
                                                                     : 0.4765
##
    tBodyGyro.std...Z tBodyGyroJerk.mean...X tBodyGyroJerk.mean...Y
                                              Min. :-0.07681
##
    Min.
           :-0.9855
                      Min.
                             :-0.15721
##
    1st Qu.:-0.9609
                                              1st Qu.:-0.04552
                      1st Qu.:-0.10322
##
    Median :-0.8010
                      Median :-0.09868
                                              Median :-0.04112
##
    Mean
           :-0.6164
                      Mean
                              :-0.09606
                                              Mean
                                                      :-0.04269
##
    3rd Qu.:-0.3106
                      3rd Ou.:-0.09110
                                              3rd Qu.:-0.03842
    Max.
           : 0.5649
                      Max.
                              :-0.02209
                                              Max.
                                                     :-0.01320
##
    tBodyGyroJerk.mean...Z tBodyGyroJerk.std...X tBodyGyroJerk.std...Y
##
           :-0.092500
                            Min.
                                   :-0.9965
                                                  Min.
                                                         :-0.9971
##
    1st Qu.:-0.061725
                            1st Qu.:-0.9800
                                                   1st Qu.:-0.9832
##
    Median :-0.053430
                            Median :-0.8396
                                                  Median :-0.8942
##
           :-0.054802
                                                          :-0.7636
    Mean
                            Mean
                                   :-0.7036
                                                  Mean
##
    3rd Qu.:-0.048985
                            3rd Qu.:-0.4629
                                                   3rd Qu.:-0.5861
##
                                                         : 0.2959
           :-0.006941
                            Max.
                                   : 0.1791
                                                  Max.
##
    tBodyGyroJerk.std...Z tBodyAccMag.mean.. tBodyAccMag.std..
##
    Min.
           :-0.9954
                          Min.
                                  :-0.9865
                                              Min.
                                                     :-0.9865
##
    1st Qu.:-0.9848
                          1st Qu.:-0.9573
                                              1st Qu.:-0.9430
##
                                              Median :-0.6074
    Median :-0.8610
                          Median :-0.4829
##
    Mean
           :-0.7096
                          Mean
                                  :-0.4973
                                              Mean
                                                      :-0.5439
##
    3rd Qu.:-0.4741
                           3rd Qu.:-0.0919
                                               3rd Qu.:-0.2090
##
    Max.
           : 0.1932
                          Max.
                                  : 0.6446
                                              Max.
                                                      : 0.4284
##
    tGravityAccMag.mean..
                          tGravityAccMag.std.. tBodyAccJerkMag.mean..
##
    Min.
           :-0.9865
                          Min.
                                  :-0.9865
                                                Min.
                                                        :-0.9928
##
    1st Qu.:-0.9573
                          1st Qu.:-0.9430
                                                1st Qu.:-0.9807
##
    Median :-0.4829
                          Median :-0.6074
                                                Median :-0.8168
##
    Mean
           :-0.4973
                          Mean
                                  :-0.5439
                                                Mean
                                                        :-0.6079
    3rd Qu.:-0.0919
##
                           3rd Qu.:-0.2090
                                                3rd Qu.:-0.2456
##
    Max.
           : 0.6446
                          Max.
                                  : 0.4284
                                                Max.
                                                        : 0.4345
##
    tBodyAccJerkMag.std..
                          tBodyGyroMag.mean..
                                               tBodyGyroMag.std..
##
    Min. :-0.9946
                          Min. :-0.9807
                                               Min. :-0.9814
                          1st Qu.:-0.9461
                                                1st Qu.:-0.9476
##
    1st Qu.:-0.9765
    Median :-0.8014
                          Median :-0.6551
                                               Median :-0.7420
```

```
Mean :-0.5842
                           Mean
                                  :-0.5652
                                                Mean :-0.6304
                                                3rd Qu.:-0.3602
##
    3rd Qu.:-0.2173
                           3rd Qu.:-0.2159
##
    Max.
           : 0.4506
                           Max.
                                  : 0.4180
                                               Max.
                                                       : 0.3000
##
    tBodyGyroJerkMag.mean.. tBodyGyroJerkMag.std.. fBodyAcc.mean...X
##
    Min.
           :-0.99732
                             Min.
                                    :-0.9977
                                                     Min.
                                                            :-0.9952
##
    1st Qu.:-0.98515
                             1st Qu.:-0.9805
                                                     1st Qu.:-0.9787
                                                     Median :-0.7691
##
    Median :-0.86479
                             Median :-0.8809
##
    Mean
           :-0.73637
                             Mean
                                    :-0.7550
                                                     Mean
                                                            :-0.5758
##
    3rd Qu.:-0.51186
                             3rd Qu.:-0.5767
                                                     3rd Qu.:-0.2174
##
    Max.
           : 0.08758
                             Max.
                                    : 0.2502
                                                            : 0.5370
                                                     Max.
##
    fBodyAcc.mean...Y
                       fBodyAcc.mean...Z fBodyAcc.std...X fBodyAcc.std...Y
                       Min.
##
    Min.
           :-0.98903
                              :-0.9895
                                          Min.
                                                 :-0.9966
                                                             Min.
                                                                    :-0.99068
##
    1st Qu.:-0.95361
                        1st Qu.:-0.9619
                                          1st Qu.:-0.9820
                                                             1st Qu.:-0.94042
##
    Median :-0.59498
                       Median :-0.7236
                                          Median :-0.7470
                                                             Median :-0.51338
##
                               :-0.6297
                                                  :-0.5522
    Mean
           :-0.48873
                       Mean
                                          Mean
                                                             Mean
                                                                     :-0.48148
##
    3rd Qu.:-0.06341
                        3rd Qu.:-0.3183
                                           3rd Qu.:-0.1966
                                                             3rd Qu.:-0.07913
##
    Max.
           : 0.52419
                       Max.
                               : 0.2807
                                          Max.
                                                 : 0.6585
                                                             Max.
                                                                     : 0.56019
##
    fBodyAcc.std...Z
                       fBodyAccJerk.mean...X fBodyAccJerk.mean...Y
##
    Min.
           :-0.9872
                      Min.
                              :-0.9946
                                             Min.
                                                     :-0.9894
##
    1st Qu.:-0.9459
                      1st Qu.:-0.9828
                                              1st Qu.:-0.9725
##
                                             Median :-0.7817
    Median :-0.6441
                      Median :-0.8126
    Mean
                      Mean
##
           :-0.5824
                              :-0.6139
                                                     :-0.5882
                                             Mean
##
    3rd Qu.:-0.2655
                       3rd Qu.:-0.2820
                                              3rd Qu.:-0.1963
##
    Max.
           : 0.6871
                      Max.
                              : 0.4743
                                                     : 0.2767
                                             Max.
##
    fBodyAccJerk.mean...Z fBodyAccJerk.std...X fBodyAccJerk.std...Y
##
    Min.
           :-0.9920
                           Min.
                                  :-0.9951
                                                Min.
                                                        :-0.9905
##
    1st Qu.:-0.9796
                           1st Qu.:-0.9847
                                                 1st Qu.:-0.9737
##
    Median :-0.8707
                           Median :-0.8254
                                                 Median :-0.7852
##
    Mean
           :-0.7144
                           Mean
                                  :-0.6121
                                                Mean
                                                        :-0.5707
##
    3rd Qu.:-0.4697
                           3rd Qu.:-0.2475
                                                 3rd Qu.:-0.1685
##
    Max.
           : 0.1578
                           Max.
                                  : 0.4768
                                                Max.
                                                        : 0.3498
##
    fBodyAccJerk.std...Z fBodyGyro.mean...X fBodyGyro.mean...Y
##
    Min.
           :-0.993108
                          Min.
                                 :-0.9931
                                             Min.
                                                     :-0.9940
##
    1st Qu.:-0.983747
                          1st Qu.:-0.9697
                                              1st Qu.:-0.9700
##
    Median :-0.895121
                          Median :-0.7300
                                              Median :-0.8141
##
    Mean
           :-0.756489
                          Mean
                                 :-0.6367
                                             Mean
                                                     :-0.6767
##
    3rd Qu.:-0.543787
                          3rd Qu.:-0.3387
                                              3rd Qu.:-0.4458
##
           :-0.006236
                          Max.
                                 : 0.4750
                                             Max.
                                                     : 0.3288
    Max.
##
    fBodyGyro.mean...Z fBodyGyro.std...X fBodyGyro.std...Y fBodyGyro.std...Z
##
           :-0.9860
                       Min.
                                          Min.
                                                  :-0.9944
    Min.
                               :-0.9947
                                                             Min.
                                                                    :-0.9867
##
    1st Qu.:-0.9624
                        1st Qu.:-0.9750
                                           1st Qu.:-0.9602
                                                             1st Qu.:-0.9643
##
    Median :-0.7909
                       Median :-0.8086
                                          Median :-0.7964
                                                             Median :-0.8224
##
    Mean
           :-0.6044
                       Mean
                               :-0.7110
                                          Mean
                                                  :-0.6454
                                                             Mean
                                                                    :-0.6577
                        3rd Qu.:-0.4813
##
    3rd Qu.:-0.2635
                                           3rd Qu.:-0.4154
                                                             3rd Qu.:-0.3916
##
    Max.
                       Max.
           : 0.4924
                               : 0.1966
                                          Max.
                                                  : 0.6462
                                                             Max.
                                                                    : 0.5225
##
    fBodyAccMag.mean..
                       fBodyAccMag.std..
                                          fBodyBodyAccJerkMag.mean..
##
    Min.
           :-0.9868
                       Min.
                               :-0.9876
                                          Min.
                                                  :-0.9940
##
    1st Qu.:-0.9560
                        1st Qu.:-0.9452
                                          1st Qu.:-0.9770
##
    Median :-0.6703
                       Median :-0.6513
                                          Median :-0.7940
    Mean :-0.5365
                       Mean :-0.6210
                                          Mean :-0.5756
```

```
3rd Ou.:-0.1622
                     3rd Ou.:-0.3654 3rd Ou.:-0.1872
## Max. : 0.5866
                     Max.
                           : 0.1787
                                      Max. : 0.5384
##
  fBodyBodyAccJerkMag.std.. fBodyBodyGyroMag.mean.. fBodyBodyGyroMag.std..
                                                   Min. :-0.9815
##
   Min.
         :-0.9944
                            Min. :-0.9865
##
   1st Qu.:-0.9752
                            1st Qu.:-0.9616
                                                   1st Qu.:-0.9488
##
   Median :-0.8126
                            Median :-0.7657
                                                   Median :-0.7727
## Mean
         :-0.5992
                            Mean :-0.6671
                                                   Mean :-0.6723
##
   3rd Qu.:-0.2668
                            3rd Qu.:-0.4087
                                                   3rd Qu.:-0.4277
## Max.
                                                   Max.
         : 0.3163
                            Max.
                                  : 0.2040
                                                         : 0.2367
   fBodyBodyGyroJerkMag.mean.. fBodyBodyGyroJerkMag.std..
##
##
   Min.
         :-0.9976
                              Min.
                                     :-0.9976
## 1st Qu.:-0.9813
                              1st Qu.:-0.9802
## Median :-0.8779
                              Median :-0.8941
## Mean
         :-0.7564
                              Mean :-0.7715
## 3rd Qu.:-0.5831
                              3rd Qu.:-0.6081
## Max. : 0.1466
                              Max. : 0.2878
```