Data Dictionary

Tidy Data Set 1 [stored in variable var_TidyDataSet1] and Tidy Data Set 2 [stored in variable var_TidyDataSet2]. The only difference between the two data set is that the second tidy dataset is a condensed form of the first. The second tidy data set is computed by taking a mean of all the observations (#3 onwards below) across a combination of subject (#1 below) and activity (#2 below).

#	Column Name	Description (Feature Data Set starts from #3)	Typical Actual Data Elements
1	Subject	Integer value denoting one of the subjects	1,2,3...
2	Activity	Text value denoting one of the activities	LAYING, SITTING, WALKING_DOWNSTAIRS...
3	tBodyAcc-mean()-X	Mean of body acceleration X Axis	[-1,1]
4	tBodyAcc-mean()-Y	Mean of body acceleration Y Axis	[-1,1]
5	tBodyAcc-mean()-Z	Mean of body acceleration Z Axis	[-1,1]
6	tBodyAcc-std()-X	Standard Deviation of body acceleration X Axis	[-1,1]
7	tBodyAcc-std()-Y	Standard Deviation of body acceleration Y Axis	[-1,1]
8	tBodyAcc-std()-Z	Standard Deviation of body acceleration Z Axis	[-1,1]
9	tGravityAcc-mean()-X	Mean of gravitational acceleration X Axis	[-1,1]
10	tGravityAcc-mean()-Y	Mean of gravitational acceleration Y Axis	[-1,1]
11	tGravityAcc-mean()-Z	Mean of gravitational acceleration Z Axis	[-1,1]
12	tGravityAcc-std()-X	Standard Deviation of gravitational acceleration X Axis	[-1,1]
13	tGravityAcc-std()-Y	Standard Deviation of gravitational acceleration Y Axis	[-1,1]
14	tGravityAcc-std()-Z	Standard Deviation of gravitational acceleration Z Axis	[-1,1]
15	tBodyAccJerk-mean()-X	Mean of body linear acceleration Jerk Signal X Axis	[-1,1]
16	tBodyAccJerk-mean()-Y	Mean of body linear acceleration Jerk Signal Y Axis	[-1,1]
17	tBodyAccJerk-mean()-Z	Mean of body linear acceleration Jerk Signal Z Axis	[-1,1]
18	tBodyAccJerk-std()-X	Standard Deviation of body linear acceleration Jerk Signal X Axis	[-1,1]
19	tBodyAccJerk-std()-Y	Standard Deviation of body linear acceleration Jerk Signal Y Axis	[-1,1]
20	tBodyAccJerk-std()-Z	Standard Deviation of body linear acceleration Jerk Signal Z Axis	[-1,1]
21	tBodyGyro-mean()-X	Mean of body gyroscope signal X Axis	[-1,1]
22	tBodyGyro-mean()-Y	Mean of body gyroscope signal Y Axis	[-1,1]
23	tBodyGyro-mean()-Z	Mean of body gyroscope signal Z Axis	[-1,1]
24	tBodyGyro-std()-X	Standard Deviation of body gyroscope signal X Axis	[-1,1]

25	tBodyGyro-std()-Y	Standard Deviation of body gyroscope signal Y Axis	[-1,1]
26	tBodyGyro-std()-Z	Standard Deviation of body gyroscope signal Z Axis	[-1,1]
27	tBodyGyroJerk-mean()-X	Mean of gyroscopic Jerk Signal X Axis	[-1,1]
28	tBodyGyroJerk-mean()-Y	Mean of gyroscopic Jerk Signal Y Axis	[-1,1]
29	tBodyGyroJerk-mean()-Z	Mean of gyroscopic Jerk Signal Z Axis	[-1,1]
30	tBodyGyroJerk-std()-X	Standard Deviation of gyroscopic Jerk Signal X Axis	[-1,1]
31	tBodyGyroJerk-std()-Y	Standard Deviation of gyroscopic Jerk Signal Y Axis	[-1,1]
32	tBodyGyroJerk-std()-Z	Standard Deviation of gyroscopic Jerk Signal Z Axis	[-1,1]
33	tBodyAccMag-mean()	Mean of Euclidean norm of body acceleration	[-1,1]
34	tBodyAccMag-std()	Standard Deviation of Euclidean norm of body acceleration	[-1,1]
35	tGravityAccMag-mean()	Mean of Euclidean norm of gravitational acceleration	[-1,1]
36	tGravityAccMag-std()	Standard Deviation of Euclidean norm of gravitational acceleration	[-1,1]
37	tBodyAccJerkMag-mean()	Mean of Euclidean norm of body linear acceleration Jerk Signal	[-1,1]
38	tBodyAccJerkMag-std()	Standard Deviation of Euclidean norm of body linear acceleration Jerk Signal	[-1,1]
39	tBodyGyroMag-mean()	Mean of Euclidean norm of body gyroscope signal	[-1,1]
40	tBodyGyroMag-std()	Standard Deviation of Euclidean norm of body gyroscope signal	[-1,1]
41	tBodyGyroJerkMag-mean()	Mean of Euclidean norm of gyroscopic Jerk Signal	[-1,1]
42	tBodyGyroJerkMag-std()	Standard Deviation of Euclidean norm of gyroscopic Jerk Signal	[-1,1]
43	fBodyAcc-mean()-X	Fast Fourier Transform of Mean of body acceleration X Axis	[-1,1]
44	fBodyAcc-mean()-Y	Fast Fourier Transform of Mean of body acceleration Y Axis	[-1,1]
45	fBodyAcc-mean()-Z	Fast Fourier Transform of Mean of body acceleration Z Axis	[-1,1]
46	fBodyAcc-std()-X	Fast Fourier Transform of Standard Deviation of body acceleration X Axis	[-1,1]
47	fBodyAcc-std()-Y	Fast Fourier Transform of Standard Deviation of body acceleration Y Axis	[-1,1]
48	fBodyAcc-std()-Z	Fast Fourier Transform of Standard Deviation of body acceleration Z Axis	[-1,1]
49	fBodyAcc-meanFreq()-X	Fast Fourier Transform of Mean Frequency of body acceleration X Axis	[-1,1]
50	fBodyAcc-meanFreq()-Y	Fast Fourier Transform of Mean Frequency of body acceleration Y Axis	[-1,1]
51	fBodyAcc-meanFreq()-Z	Fast Fourier Transform of Mean Frequency of body acceleration Z Axis	[-1,1]
52	fBodyAccJerk-mean()-X	Fast Fourier Transform of Mean of body linear acceleration Jerk Signal X Axis	[-1,1]
53	fBodyAccJerk-mean()-Y	Fast Fourier Transform of Mean of body linear acceleration Jerk Signal Y Axis	[-1,1]
54	fBodyAccJerk-mean()-Z	Fast Fourier Transform of Mean of body linear acceleration Jerk Signal Z Axis	[-1,1]
55	fBodyAccJerk-std()-X	Fast Fourier Transform of Standard Deviation of body linear acceleration Jerk Signal X Axis	[-1,1]

56	fBodyAccJerk-std()-Y	Fast Fourier Transform of Standard Deviation of body linear acceleration Jerk Signal Y Axis	[-1,1]
57	fBodyAccJerk-std()-Z	Fast Fourier Transform of Standard Deviation of body linear acceleration Jerk Signal Z Axis	[-1,1]
58	fBodyAccJerk-meanFreq()-X	Fast Fourier Transform of Mean Frequency of body linear acceleration Jerk Signal X Axis	[-1,1]
59	fBodyAccJerk-meanFreq()-Y	Fast Fourier Transform of Mean Frequency of body linear acceleration Jerk Signal Y Axis	[-1,1]
60	fBodyAccJerk-meanFreq()-Z	Fast Fourier Transform of Mean Frequency of body linear acceleration Jerk Signal Z Axis	[-1,1]
61	fBodyGyro-mean()-X	Fast Fourier Transform of Mean of body gyroscope signal X Axis	[-1,1]
62	fBodyGyro-mean()-Y	Fast Fourier Transform of Mean of body gyroscope signal Y Axis	[-1,1]
63	fBodyGyro-mean()-Z	Fast Fourier Transform of Mean of body gyroscope signal Z Axis	[-1,1]
64	fBodyGyro-std()-X	Fast Fourier Transform of Standard Deviation of body gyroscope signal X Axis	[-1,1]
65	fBodyGyro-std()-Y	Fast Fourier Transform of Standard Deviation of body gyroscope signal Y Axis	[-1,1]
66	fBodyGyro-std()-Z	Fast Fourier Transform of Standard Deviation of body gyroscope signal Z Axis	[-1,1]
67	fBodyGyro-meanFreq()-X	Fast Fourier Transform of Mean Frequency of body gyroscope signal X Axis	[-1,1]
68	fBodyGyro-meanFreq()-Y	Fast Fourier Transform of Mean Frequency of body gyroscope signal Y Axis	[-1,1]
69	fBodyGyro-meanFreq()-Z	Fast Fourier Transform of Mean Frequency of body gyroscope signal Z Axis	[-1,1]
70	fBodyAccMag-mean()	Fast Fourier Transform of Mean of Euclidean norm of body acceleration	[-1,1]
71	fBodyAccMag-std()	Fast Fourier Transform of Standard Deviation of Euclidean norm of body acceleration	[-1,1]
72	fBodyAccMag-meanFreq()	Fast Fourier Transform of Mean Frequency of Euclidean norm of body acceleration	[-1,1]
73	fBodyBodyAccJerkMag-mean()	Fast Fourier Transform of Mean of Euclidean norm of body linear acceleration Jerk Signal	[-1,1]
74	fBodyBodyAccJerkMag-std()	Fast Fourier Transform of Standard Deviation of Euclidean norm of body linear acceleration Jerk Signal	[-1,1]
75	fBodyBodyAccJerkMag-meanFreq()	Fast Fourier Transform of Mean Frequency of Euclidean norm of body linear acceleration Jerk Signal	[-1,1]
76	fBodyBodyGyroMag-mean()	Fast Fourier Transform of Mean of Euclidean norm of body gyroscope signal	[-1,1]
77	fBodyBodyGyroMag-std()	Fast Fourier Transform of Standard Deviation of Euclidean norm of body gyroscope signal	[-1,1]
78	fBodyBodyGyroMag-meanFreq()	Fast Fourier Transform of Mean Frequency of Euclidean norm of body gyroscope signal	[-1,1]
79	fBodyBodyGyroJerkMag-mean()	Fast Fourier Transform of Mean of Euclidean norm of gyroscopic Jerk Signal	[-1,1]
80	fBodyBodyGyroJerkMag-std()	Fast Fourier Transform of Standard Deviation of Euclidean norm of gyroscopic Jerk Signal	[-1,1]
81	fBodyBodyGyroJerkMag-meanFreq()	Fast Fourier Transform of Mean Frequency of Euclidean norm of gyroscopic Jerk Signal	[-1,1]
82	angle(tBodyAccMean,gravity)	Angle between average signal pertinent to BodyAccMean and gravity	[-1,1]
83	angle(tBodyAccJerkMean),gravityMean)	Angle between average signal pertinent to BodyAccJerk and gravitymean	[-1,1]
84	angle(tBodyGyroMean,gravityMean)	Angle between average signal pertinent to BodyGyro and gravity	[-1,1]
85	angle(tBodyGyroJerkMean,gravityMean)	Angle between average signal pertinent to BodyGyroJerk and gravity	[-1,1]
86	angle(X,gravityMean)	Angle between X axis and average of gravity signal	[-1,1]

87	angle(Y,gravityMean)	Angle between Y axis and average of gravity signal	[-1,1]
88	angle(Z,gravityMean)	Angle between Z axis and average of gravity signal	[-1,1]