COURSERA – GETTING AND CLEANING DATA

COURSE PROJECT CODE BOOK

The following table describes the variables of the tidy data set, submitted in task 5 of the assignment. For each variable there is information on the data type, measurement domain (time or frequency), a description of the variable and the range of values.

VAR. N°	VARIABLE NAME	DATA TYPE	DOMAIN (TYPE OF MEASUREMENT)	DESCRIPTION	RANGE OF VALUES
1	ActivityName	Character	Not applicable	Name activity.	"Walking", "Sitting", etc.
2	SubjectID	Integer	Not applicable	ID subject (person) performing tests.	1 - 30
3	tBodyAcc-mean()-X	Numeric	Time Domain	Mean body acceleration along X-axis.	[-1, 1]
4	tBodyAcc-mean()-Y	Numeric	Time Domain	Mean body acceleration along Y-axis.	[-1, 1]
5	tBodyAcc-mean()-Z	Numeric	Time Domain	Mean body acceleration along Z-axis.	[-1, 1]
6	tGravityAcc-mean()-X	Numeric	Time Domain	Mean gravitational acceleration along X-axis.	[-1, 1]
7	tGravityAcc-mean()-Y	Numeric	Time Domain	Mean gravitational acceleration along Y-axis.	[-1, 1]
8	tGravityAcc-mean()-Z	Numeric	Time Domain	Mean gravitational acceleration along Z-axis.	[-1, 1]
9	tBodyAccJerk-mean()-X	Numeric	Time Domain	Mean body jerk acceleration along X-axis.	[-1, 1]
10	tBodyAccJerk-mean()-Y	Numeric	Time Domain	Mean body jerk acceleration along Y-axis.	[-1, 1]
11	tBodyAccJerk-mean()-Z	Numeric	Time Domain	Mean body jerk acceleration along Z-axis.	[-1, 1]
12	tBodyGyro-mean()-X	Numeric	Time Domain	Mean body angular velocity along X-axis.	[-1, 1]
13	tBodyGyro-mean()-Y	Numeric	Time Domain	Mean body angular velocity along Y-axis.	[-1, 1]
14	tBodyGyro-mean()-Z	Numeric	Time Domain	Mean body angular velocity along Z-axis.	[-1, 1]
15	tBodyGyroJerk-mean()-X	Numeric	Time Domain	Mean body jerk angular velocity along X-axis.	[-1, 1]
16	tBodyGyroJerk-mean()-Y	Numeric	Time Domain	Mean body jerk angular velocity along Y-axis.	[-1, 1]
17	tBodyGyroJerk-mean()-Z	Numeric	Time Domain	Mean body jerk angular velocity along Z-axis.	[-1, 1]

VAR. N°	VARIABLE NAME	DATA TYPE	DOMAIN (TYPE OF MEASUREMENT)	DESCRIPTION	RANGE OF VALUES
18	tBodyAccMag-mean()	Numeric	Time Domain	Mean body acceleration magnitude.	[-1, 1]
19	tGravityAccMag-mean()	Numeric	Time Domain	Mean gravitational acceleration magnitude.	[-1, 1]
20	tBodyAccJerkMag-mean()	Numeric	Time Domain	Mean body jerk acceleration magnitude.	[-1, 1]
21	tBodyGyroMag-mean()	Numeric	Time Domain	Mean body angular velocity magnitude.	[-1, 1]
22	tBodyGyroJerkMag-mean()	Numeric	Time Domain	Mean body jerk angular velocity magnitude.	[-1, 1]
23	fBodyAcc-mean()-X	Numeric	Frequency Domain	Mean body acceleration along X-axis.	[-1, 1]
24	fBodyAcc-mean()-Y	Numeric	Frequency Domain	Mean body acceleration along Y-axis.	[-1, 1]
25	fBodyAcc-mean()-Z	Numeric	Frequency Domain	Mean body acceleration along Z-axis.	[-1, 1]
26	fBodyAcc-meanFreq()-X	Numeric	Frequency Domain	Mean frequency body acceleration along X-axis.	[-1, 1]
27	fBodyAcc-meanFreq()-Y	Numeric	Frequency Domain	Mean frequency body acceleration along Y-axis.	[-1, 1]
28	fBodyAcc-meanFreq()-Z	Numeric	Frequency Domain	Mean frequency body acceleration along Z-axis.	[-1, 1]
29	fBodyAccJerk-mean()-X	Numeric	Frequency Domain	Mean body jerk acceleration along X-axis.	[-1, 1]
30	fBodyAccJerk-mean()-Y	Numeric	Frequency Domain	Mean body jerk acceleration along Y-axis.	[-1, 1]
31	fBodyAccJerk-mean()-Z	Numeric	Frequency Domain	Mean body jerk acceleration along Z-axis.	[-1, 1]
32	fBodyAccJerk-meanFreq()-X	Numeric	Frequency Domain	Mean frequency body jerk acceleration along X-axis.	[-1, 1]
33	fBodyAccJerk-meanFreq()-Y	Numeric	Frequency Domain	Mean frequency body jerk acceleration along Y-axis.	[-1, 1]
34	fBodyAccJerk-meanFreq()-Z	Numeric	Frequency Domain	Mean frequency body jerk acceleration along Z-axis.	[-1, 1]
35	fBodyGyro-mean()-X	Numeric	Frequency Domain	Mean body angular velocity along X-axis.	[-1, 1]
36	fBodyGyro-mean()-Y	Numeric	Frequency Domain	Mean body angular velocity along Y-axis.	[-1, 1]
37	fBodyGyro-mean()-Z	Numeric	Frequency Domain	Mean body angular velocity along Z-axis.	[-1, 1]
38	fBodyGyro-meanFreq()-X	Numeric	Frequency Domain	Mean frequency body angular velocity along X-axis.	[-1, 1]
39	fBodyGyro-meanFreq()-Y	Numeric	Frequency Domain	Mean frequency body angular velocity along Y-axis.	[-1, 1]
40	fBodyGyro-meanFreq()-Z	Numeric	Frequency Domain	Mean frequency body angular velocity along Z-axis.	[-1, 1]

VAR. N°	VARIABLE NAME	DATA TYPE	DOMAIN (TYPE OF MEASUREMENT)	DESCRIPTION	RANGE OF VALUES
41	fBodyAccMag-mean()	Numeric	Frequency Domain	Mean body acceleration magnitude.	[-1, 1]
42	fBodyAccMag-meanFreq()	Numeric	Frequency Domain	Mean frequency body acceleration magnitude.	[-1, 1]
43	fBodyBodyAccJerkMag-mean()	Numeric	Frequency Domain	Mean body jerk acceleration magnitude.	[-1, 1]
44	fBodyBodyAccJerkMag-meanFreq()	Numeric	Frequency Domain	Mean frequency body jerk acceleration magnitude.	[-1, 1]
45	fBodyBodyGyroMag-mean()	Numeric	Frequency Domain	Mean body angular velocity magnitude.	[-1, 1]
46	fBodyBodyGyroMag-meanFreq()	Numeric	Frequency Domain	Mean frequency body angular velocity magnitude.	[-1, 1]
47	fBodyBodyGyroJerkMag-mean()	Numeric	Frequency Domain	Mean body jerk angular velocity magnitude.	[-1, 1]
48	fBodyBodyGyroJerkMag-meanFreq()	Numeric	Frequency Domain	Mean frequency body jerk angular velocity magnitude.	[-1, 1]
49	tBodyAcc-std()-X	Numeric	Time Domain	Standard deviation of body acceleration along X-axis.	[-1, 1]
50	tBodyAcc-std()-Y	Numeric	Time Domain	Standard deviation of body acceleration along Y-axis.	[-1, 1]
51	tBodyAcc-std()-Z	Numeric	Time Domain	Standard deviation of body acceleration along Z-axis.	[-1, 1]
52	tGravityAcc-std()-X	Numeric	Time Domain	Standard deviation of gravitational acceleration along X-axis.	[-1, 1]
53	tGravityAcc-std()-Y	Numeric	Time Domain	Standard deviation of gravitational acceleration along Y-axis.	[-1, 1]
54	tGravityAcc-std()-Z	Numeric	Time Domain	Standard deviation of gravitational acceleration along Z-axis.	[-1, 1]
55	tBodyAccJerk-std()-X	Numeric	Time Domain	Standard deviation of body jerk acceleration along X-axis.	[-1, 1]
56	tBodyAccJerk-std()-Y	Numeric	Time Domain	Standard deviation of body jerk acceleration along Y-axis.	[-1, 1]
57	tBodyAccJerk-std()-Z	Numeric	Time Domain	Standard deviation of body jerk acceleration along Z-axis.	[-1, 1]
58	tBodyGyro-std()-X	Numeric	Time Domain	Standard deviation of body angular velocity along X-axis.	[-1, 1]
59	tBodyGyro-std()-Y	Numeric	Time Domain	Standard deviation of body angular velocity along Y-axis.	[-1, 1]
60	tBodyGyro-std()-Z	Numeric	Time Domain	Standard deviation of body angular velocity along Z-axis.	[-1, 1]
61	tBodyGyroJerk-std()-X	Numeric	Time Domain	Standard deviation of body jerk angular velocity along X-axis.	[-1, 1]

VAR. N°	VARIABLE NAME	DATA TYPE	DOMAIN (TYPE OF MEASUREMENT)	DESCRIPTION	RANGE OF VALUES
62	tBodyGyroJerk-std()-Y	Numeric	Time Domain	Standard deviation of body jerk angular velocity along Y-axis.	[-1, 1]
63	tBodyGyroJerk-std()-Z	Numeric	Time Domain	Standard deviation of body jerk angular velocity along Z-axis.	[-1, 1]
64	tBodyAccMag-std()	Numeric	Time Domain	Standard deviation of body acceleration magnitude.	[-1, 1]
65	tGravityAccMag-std()	Numeric	Time Domain	Standard deviation of gravitational acceleration magnitude.	[-1, 1]
66	tBodyAccJerkMag-std()	Numeric	Time Domain	Standard deviation of body jerk acceleration magnitude.	[-1, 1]
67	tBodyGyroMag-std()	Numeric	Time Domain	Standard deviation of body angular velocity magnitude.	[-1, 1]
68	tBodyGyroJerkMag-std()	Numeric	Time Domain	Standard deviation of body jerk angular velocity magnitude.	[-1, 1]
69	fBodyAcc-std()-X	Numeric	Frequency Domain	Standard deviation of body acceleration along X-axis.	[-1, 1]
70	fBodyAcc-std()-Y	Numeric	Frequency Domain	Standard deviation of body acceleration along Y-axis.	[-1, 1]
71	fBodyAcc-std()-Z	Numeric	Frequency Domain	Standard deviation of body acceleration along Z-axis.	[-1, 1]
72	fBodyAccJerk-std()-X	Numeric	Frequency Domain	Standard deviation of body jerk acceleration along X-axis.	[-1, 1]
73	fBodyAccJerk-std()-Y	Numeric	Frequency Domain	Standard deviation of body jerk acceleration along Y-axis.	[-1, 1]
74	fBodyAccJerk-std()-Z	Numeric	Frequency Domain	Standard deviation of body jerk acceleration along Z-axis.	[-1, 1]
75	fBodyGyro-std()-X	Numeric	Frequency Domain	Standard deviation of body angular velocity along X-axis.	[-1, 1]
76	fBodyGyro-std()-Y	Numeric	Frequency Domain	Standard deviation of body angular velocity along Y-axis.	[-1, 1]
77	fBodyGyro-std()-Z	Numeric	Frequency Domain	Standard deviation of body angular velocity along Z-axis.	[-1, 1]
78	fBodyAccMag-std()	Numeric	Frequency Domain	Standard deviation of body acceleration magnitude.	[-1, 1]
79	fBodyBodyAccJerkMag-std()	Numeric	Frequency Domain	Standard deviation of body jerk acceleration magnitude.	[-1, 1]
80	fBodyBodyGyroMag-std()	Numeric	Frequency Domain	Standard deviation of body angular velocity magnitude.	[-1, 1]
81	fBodyBodyGyroJerkMag-std()	Numeric	Frequency Domain	Standard deviation of body jerk angular velocity magnitude.	[-1, 1]