**Variables in “tidy\_data.txt”**

**Subject\_ID:**  unique identification number for each study participant

Range: 1-30

**Activity\_ID:** types of activities

1 WALKING

2 WALKING\_UPSTAIRS

3 WALKING\_DOWNSTAIRS

4 SITTING

5 STANDING

6 LAYING

**Other variables :** continuous measurements

Variable Name Coding:

X:   X-Axis

Y: Y-Axis

Z:Z-Axis

Acc:  Acceleration

Gyro:  Gyroscope

Mag:  Magnitude

Mean():  Average

std():  Standard deviation

t:  Time prefix

f:  Frequency prefix

|  |  |
| --- | --- |
| **Variable Name** | **Units** |
| tBodyAcc-mean()-X | standard gravity units |
| tBodyAcc-mean()-Y | standard gravity units |
| tBodyAcc-mean()-Z | standard gravity units |
| tBodyAcc-std()-X | standard gravity units |
| tBodyAcc-std()-Y | standard gravity units |
| tBodyAcc-std()-Z | standard gravity units |
| tGravityAcc-mean()-X | standard gravity units |
| tGravityAcc-mean()-Y | standard gravity units |
| tGravityAcc-mean()-Z | standard gravity units |
| tGravityAcc-std()-X | standard gravity units |
| tGravityAcc-std()-Y | standard gravity units |
| tGravityAcc-std()-Z | standard gravity units |
| tBodyAccJerk-mean()-X | standard gravity units |
| tBodyAccJerk-mean()-Y | standard gravity units |
| tBodyAccJerk-mean()-Z | standard gravity units |
| tBodyAccJerk-std()-X | standard gravity units |
| tBodyAccJerk-std()-Y | standard gravity units |
| tBodyAccJerk-std()-Z | standard gravity units |
| tBodyGyro-mean()-X | radians per second |
| tBodyGyro-mean()-Y | radians per second |
| tBodyGyro-mean()-Z | radians per second |
| tBodyGyro-std()-X | radians per second |
| tBodyGyro-std()-Y | radians per second |
| tBodyGyro-std()-Z | radians per second |
| tBodyGyroJerk-mean()-X | radians per second |
| tBodyGyroJerk-mean()-Y | radians per second |
| tBodyGyroJerk-mean()-Z | radians per second |
| tBodyGyroJerk-std()-X | radians per second |
| tBodyGyroJerk-std()-Y | radians per second |
| tBodyGyroJerk-std()-Z | radians per second |
| tBodyAccMag-mean() | standard gravity units |
| tBodyAccMag-std() | standard gravity units |
| tGravityAccMag-mean() | standard gravity units |
| tGravityAccMag-std() | standard gravity units |
| tBodyAccJerkMag-mean() | standard gravity units |
| tBodyAccJerkMag-std() | standard gravity units |
| tBodyGyroMag-mean() | radians per second |
| tBodyGyroMag-std() | radians per second |
| tBodyGyroJerkMag-mean() | radians per second |
| tBodyGyroJerkMag-std() | radians per second |
| fBodyAcc-mean()-X | standard gravity units |
| fBodyAcc-mean()-Y | standard gravity units |
| fBodyAcc-mean()-Z | standard gravity units |
| fBodyAcc-std()-X | standard gravity units |
| fBodyAcc-std()-Y | standard gravity units |
| fBodyAcc-std()-Z | standard gravity units |
| fBodyAccJerk-mean()-X | standard gravity units |
| fBodyAccJerk-mean()-Y | standard gravity units |
| fBodyAccJerk-mean()-Z | standard gravity units |
| fBodyAccJerk-std()-Y | standard gravity units |
| fBodyAccJerk-std()-Z | standard gravity units |
| fBodyGyro-mean()-X | radians per second |
| fBodyGyro-mean()-Y | radians per second |
| fBodyGyro-mean()-Z | radians per second |
| fBodyGyro-std()-X | radians per second |
| fBodyGyro-std()-Y | radians per second |
| fBodyGyro-std()-Z | radians per second |
| fBodyAccMag-mean() | standard gravity units |
| fBodyAccMag-std() | standard gravity units |
| fBodyBodyAccJerkMag-mean() | standard gravity units |
| fBodyBodyAccJerkMag-std() | standard gravity units |
| fBodyBodyGyroMag-mean() | radians per second |
| fBodyBodyGyroMag-std() | radians per second |
| fBodyBodyGyroJerkMag-mean() | radians per second |
| fBodyBodyGyroJerkMag-std() | radians per second |

**Variables in “aggregate\_data.txt”**

**Subject\_ID:**  unique identification number for each study participant

Range: 1-30

**Activity\_ID:** types of activities

1 WALKING

2 WALKING\_UPSTAIRS

3 WALKING\_DOWNSTAIRS

4 SITTING

5 STANDING

6 LAYING

**Other variables :** continuous measurements

Variable Name Coding:

X:   X-Axis

Y: Y-Axis

Z:Z-Axis

Acc:  Acceleration

Gyro:  Gyroscope

Mag:  Magnitude

Mean():  Average

std():  Standard deviation

t:  Time prefix

f:  Frequency prefix

|  |  |  |
| --- | --- | --- |
| **Variable Name** | **Units** | **Aggregation** |
| tBodyAcc-mean()-X | standard gravity units | average |
| tBodyAcc-mean()-Y | standard gravity units | average |
| tBodyAcc-mean()-Z | standard gravity units | average |
| tBodyAcc-std()-X | standard gravity units | average |
| tBodyAcc-std()-Y | standard gravity units | average |
| tBodyAcc-std()-Z | standard gravity units | average |
| tGravityAcc-mean()-X | standard gravity units | average |
| tGravityAcc-mean()-Y | standard gravity units | average |
| tGravityAcc-mean()-Z | standard gravity units | average |
| tGravityAcc-std()-X | standard gravity units | average |
| tGravityAcc-std()-Y | standard gravity units | average |
| tGravityAcc-std()-Z | standard gravity units | average |
| tBodyAccJerk-mean()-X | standard gravity units | average |
| tBodyAccJerk-mean()-Y | standard gravity units | average |
| tBodyAccJerk-mean()-Z | standard gravity units | average |
| tBodyAccJerk-std()-X | standard gravity units | average |
| tBodyAccJerk-std()-Y | standard gravity units | average |
| tBodyAccJerk-std()-Z | standard gravity units | average |
| tBodyGyro-mean()-X | radians per second | average |
| tBodyGyro-mean()-Y | radians per second | average |
| tBodyGyro-mean()-Z | radians per second | average |
| tBodyGyro-std()-X | radians per second | average |
| tBodyGyro-std()-Y | radians per second | average |
| tBodyGyro-std()-Z | radians per second | average |
| tBodyGyroJerk-mean()-X | radians per second | average |
| tBodyGyroJerk-mean()-Y | radians per second | average |
| tBodyGyroJerk-mean()-Z | radians per second | average |
| tBodyGyroJerk-std()-X | radians per second | average |
| tBodyGyroJerk-std()-Y | radians per second | average |
| tBodyGyroJerk-std()-Z | radians per second | average |
| tBodyAccMag-mean() | standard gravity units | average |
| tBodyAccMag-std() | standard gravity units | average |
| tGravityAccMag-mean() | standard gravity units | average |
| tGravityAccMag-std() | standard gravity units | average |
| tBodyAccJerkMag-mean() | standard gravity units | average |
| tBodyAccJerkMag-std() | standard gravity units | average |
| tBodyGyroMag-mean() | radians per second | average |
| tBodyGyroMag-std() | radians per second | average |
| tBodyGyroJerkMag-mean() | radians per second | average |
| tBodyGyroJerkMag-std() | radians per second | average |
| fBodyAcc-mean()-X | standard gravity units | average |
| fBodyAcc-mean()-Y | standard gravity units | average |
| fBodyAcc-mean()-Z | standard gravity units | average |
| fBodyAcc-std()-X | standard gravity units | average |
| fBodyAcc-std()-Y | standard gravity units | average |
| fBodyAcc-std()-Z | standard gravity units | average |
| fBodyAccJerk-mean()-X | standard gravity units | average |
| fBodyAccJerk-mean()-Y | standard gravity units | average |
| fBodyAccJerk-mean()-Z | standard gravity units | average |
| fBodyAccJerk-std()-Y | standard gravity units | average |
| fBodyAccJerk-std()-Z | standard gravity units | average |
| fBodyGyro-mean()-X | radians per second | average |
| fBodyGyro-mean()-Y | radians per second | average |
| fBodyGyro-mean()-Z | radians per second | average |
| fBodyGyro-std()-X | radians per second | average |
| fBodyGyro-std()-Y | radians per second | average |
| fBodyGyro-std()-Z | radians per second | average |
| fBodyAccMag-mean() | standard gravity units | average |
| fBodyAccMag-std() | standard gravity units | average |
| fBodyBodyAccJerkMag-mean() | standard gravity units | average |
| fBodyBodyAccJerkMag-std() | standard gravity units | average |
| fBodyBodyGyroMag-mean() | radians per second | average |
| fBodyBodyGyroMag-std() | radians per second | average |
| fBodyBodyGyroJerkMag-mean() | radians per second | average |
| fBodyBodyGyroJerkMag-std() | radians per second | average |