####################################################################

The data files will not be listed in this file, because they are big

Transforming process is listed below

####################################################################

## Activity Data File

activity id activity

1 1 WALKING

2 2 WALKING\_UPSTAIRS

3 3 WALKING\_DOWNSTAIRS

4 4 SITTING

5 5 STANDING

6 6 LAYING

####################################################################

## Features - Total 561 rows - First 10 rows

V1 V2

1 1 tBodyAcc-mean()-X

2 2 tBodyAcc-mean()-Y

3 3 tBodyAcc-mean()-Z

4 4 tBodyAcc-std()-X

5 5 tBodyAcc-std()-Y

6 6 tBodyAcc-std()-Z

7 7 tBodyAcc-mad()-X

8 8 tBodyAcc-mad()-Y

9 9 tBodyAcc-mad()-Z

10 10 tBodyAcc-max()-X

## Final Features (mean and stand) - Subset of Featurs - Total 79 rows

###################################################################

## Load files - raw data

Files Test X and Y - with 2.947 rows

File with Test Subject - 1 column - 2.947 rows

Loading raw data

Files Train X and Y - with 7.352 rows

File with Train Subject - 1 column - 7.352 rows

Loading raw data

###################################################################

## Transformations

## Concatenate Train and Test X - First 2 rows

tBodyAcc-mean()-X tBodyAcc-mean()-Y tBodyAcc-mean()-Z tBodyAcc-std()-X tBodyAcc-std()-Y tBodyAcc-std()-Z tGravityAcc-mean()-X tGravityAcc-mean()-Y tGravityAcc-mean()-Z tGravityAcc-std()-X tGravityAcc-std()-Y tGravityAcc-std()-Z tBodyAccJerk-mean()-X tBodyAccJerk-mean()-Y tBodyAccJerk-mean()-Z tBodyAccJerk-std()-X tBodyAccJerk-std()-Y tBodyAccJerk-std()-Z tBodyGyro-mean()-X tBodyGyro-mean()-Y tBodyGyro-mean()-Z tBodyGyro-std()-X tBodyGyro-std()-Y tBodyGyro-std()-Z tBodyGyroJerk-mean()-X tBodyGyroJerk-mean()-Y tBodyGyroJerk-mean()-Z tBodyGyroJerk-std()-X tBodyGyroJerk-std()-Y tBodyGyroJerk-std()-Z tBodyAccMag-mean() tBodyAccMag-std() tGravityAccMag-mean() tGravityAccMag-std() tBodyAccJerkMag-mean() tBodyAccJerkMag-std() tBodyGyroMag-mean() tBodyGyroMag-std() tBodyGyroJerkMag-mean() tBodyGyroJerkMag-std() fBodyAcc-mean()-X fBodyAcc-mean()-Y fBodyAcc-mean()-Z fBodyAcc-std()-X fBodyAcc-std()-Y fBodyAcc-std()-Z fBodyAcc-meanFreq()-X fBodyAcc-meanFreq()-Y fBodyAcc-meanFreq()-Z fBodyAccJerk-mean()-X fBodyAccJerk-mean()-Y fBodyAccJerk-mean()-Z fBodyAccJerk-std()-X fBodyAccJerk-std()-Y fBodyAccJerk-std()-Z fBodyAccJerk-meanFreq()-X fBodyAccJerk-meanFreq()-Y fBodyAccJerk-meanFreq()-Z fBodyGyro-mean()-X fBodyGyro-mean()-Y fBodyGyro-mean()-Z fBodyGyro-std()-X fBodyGyro-std()-Y fBodyGyro-std()-Z fBodyGyro-meanFreq()-X fBodyGyro-meanFreq()-Y fBodyGyro-meanFreq()-Z fBodyAccMag-mean() fBodyAccMag-std() fBodyAccMag-meanFreq() fBodyBodyAccJerkMag-mean() fBodyBodyAccJerkMag-std() fBodyBodyAccJerkMag-meanFreq() fBodyBodyGyroMag-mean() fBodyBodyGyroMag-std() fBodyBodyGyroMag-meanFreq() fBodyBodyGyroJerkMag-mean() fBodyBodyGyroJerkMag-std() fBodyBodyGyroJerkMag-meanFreq()

1 0.28858451 -2.029417e-02 -1.329051e-01 -9.952786e-01 -0.983110610 -0.913526450 0.96339614 -0.1408396800 1.153749e-01 -0.9852497 -0.98170843 -0.87762497 0.0779963450 0.0050008031 -6.783081e-02 -0.993519060 -0.988359990 -0.99357497 -0.0061008489 -0.031364791 0.1077254000 -0.98531027 -0.976623440 -0.99220528 -0.0991674000 -0.0555173690 -0.0619857970 -0.992110670 -0.99251927 -0.992055280 -0.9594338800 -0.950551500 -0.9594338800 -0.950551500 -0.993305860 -0.9943364100 -0.968959080 -0.964335180 -0.99424782 -0.99136761 -0.994783190 -0.9829841000 -0.93926865 -0.995421750 -0.9831329700 -0.906164980 0.2524829000 0.131835750 -0.0520502510 -0.9923324500 -9.871699e-01 -0.98969609 -0.9958206800 -9.909363e-01 -0.9970517 0.8703845100 0.2106970000 0.2637078900 -0.986574420 -0.981761530 -0.9895147800 -0.985032640 -0.973886070 -0.99403493 -0.2575488800 0.0979471090 0.5471510500 -0.952154660 -0.956133970 -0.0884361200 -0.9937256500 -0.9937549500 0.3469885300 -0.980134850 -0.961309440 -1.289889e-01 -0.991990440 -0.99069746 -0.0743230270

2 0.27841883 -1.641057e-02 -1.235202e-01 -9.982453e-01 -0.975300220 -0.960321990 0.96656113 -0.1415512700 1.093788e-01 -0.9974113 -0.98944741 -0.93163868 0.0740067090 0.0057711041 2.937663e-02 -0.995548140 -0.981063630 -0.99184570 -0.0161116200 -0.083893777 0.1005842900 -0.98311996 -0.989045800 -0.98912123 -0.1105028300 -0.0448187310 -0.0592428220 -0.989872560 -0.99729260 -0.993851000 -0.9792891500 -0.976057070 -0.9792891500 -0.976057070 -0.991253490 -0.9916944100 -0.980683140 -0.983754190 -0.99512320 -0.99610164 -0.997450720 -0.9768517300 -0.97352267 -0.998680260 -0.9749298100 -0.955438110 0.2713085500 0.042863639 -0.0143097550 -0.9950322200 -9.813115e-01 -0.98973975 -0.9966523500 -9.820839e-01 -0.9926268 0.6085135200 -0.0536756130 0.0631482680 -0.977386710 -0.992530030 -0.9896057800 -0.984904340 -0.987168070 -0.98978468 -0.0481674350 -0.4016079100 -0.0681783290 -0.980856620 -0.975865760 -0.0441498870 -0.9903354900 -0.9919602900 0.5320605200 -0.988295550 -0.983321920 -2.719585e-01 -0.995853860 -0.99639947 0.1580745400

## Transformations

## Concatenate Train and Test Y - First 10 rows

activity

1 STANDING

2 STANDING

3 STANDING

4 STANDING

5 STANDING

6 STANDING

7 STANDING

8 STANDING

9 STANDING

10 STANDING

###################################################################

## Change code of my.data to description of Activity - First 10 rows

activity

1 STANDING

2 STANDING

3 STANDING

4 STANDING

5 STANDING

6 STANDING

7 STANDING

8 STANDING

9 STANDING

10 STANDING

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## Concatenate Data X - Data Y - Subjects

## Without aggregation - First 2 rows

activity subject tBodyAcc-mean()-X tBodyAcc-mean()-Y tBodyAcc-mean()-Z tBodyAcc-std()-X tBodyAcc-std()-Y tBodyAcc-std()-Z tGravityAcc-mean()-X tGravityAcc-mean()-Y tGravityAcc-mean()-Z tGravityAcc-std()-X tGravityAcc-std()-Y tGravityAcc-std()-Z tBodyAccJerk-mean()-X tBodyAccJerk-mean()-Y tBodyAccJerk-mean()-Z tBodyAccJerk-std()-X tBodyAccJerk-std()-Y tBodyAccJerk-std()-Z tBodyGyro-mean()-X tBodyGyro-mean()-Y tBodyGyro-mean()-Z tBodyGyro-std()-X tBodyGyro-std()-Y tBodyGyro-std()-Z tBodyGyroJerk-mean()-X tBodyGyroJerk-mean()-Y tBodyGyroJerk-mean()-Z tBodyGyroJerk-std()-X tBodyGyroJerk-std()-Y tBodyGyroJerk-std()-Z tBodyAccMag-mean() tBodyAccMag-std() tGravityAccMag-mean() tGravityAccMag-std() tBodyAccJerkMag-mean() tBodyAccJerkMag-std() tBodyGyroMag-mean() tBodyGyroMag-std() tBodyGyroJerkMag-mean() tBodyGyroJerkMag-std() fBodyAcc-mean()-X fBodyAcc-mean()-Y fBodyAcc-mean()-Z fBodyAcc-std()-X fBodyAcc-std()-Y fBodyAcc-std()-Z fBodyAcc-meanFreq()-X fBodyAcc-meanFreq()-Y fBodyAcc-meanFreq()-Z fBodyAccJerk-mean()-X fBodyAccJerk-mean()-Y fBodyAccJerk-mean()-Z fBodyAccJerk-std()-X fBodyAccJerk-std()-Y fBodyAccJerk-std()-Z fBodyAccJerk-meanFreq()-X fBodyAccJerk-meanFreq()-Y fBodyAccJerk-meanFreq()-Z fBodyGyro-mean()-X fBodyGyro-mean()-Y fBodyGyro-mean()-Z fBodyGyro-std()-X fBodyGyro-std()-Y fBodyGyro-std()-Z fBodyGyro-meanFreq()-X fBodyGyro-meanFreq()-Y fBodyGyro-meanFreq()-Z fBodyAccMag-mean() fBodyAccMag-std() fBodyAccMag-meanFreq() fBodyBodyAccJerkMag-mean() fBodyBodyAccJerkMag-std() fBodyBodyAccJerkMag-meanFreq() fBodyBodyGyroMag-mean() fBodyBodyGyroMag-std() fBodyBodyGyroMag-meanFreq() fBodyBodyGyroJerkMag-mean() fBodyBodyGyroJerkMag-std() fBodyBodyGyroJerkMag-meanFreq()

1 STANDING 1 0.28858451 -2.029417e-02 -1.329051e-01 -9.952786e-01 -0.983110610 -0.913526450 0.96339614 -0.1408396800 1.153749e-01 -0.9852497 -0.98170843 -0.87762497 0.0779963450 0.0050008031 -6.783081e-02 -0.993519060 -0.988359990 -0.99357497 -0.0061008489 -0.031364791 0.1077254000 -0.98531027 -0.976623440 -0.99220528 -0.0991674000 -0.0555173690 -0.0619857970 -0.992110670 -0.99251927 -0.992055280 -0.9594338800 -0.950551500 -0.9594338800 -0.950551500 -0.993305860 -0.9943364100 -0.968959080 -0.964335180 -0.99424782 -0.99136761 -0.994783190 -0.9829841000 -0.93926865 -0.995421750 -0.9831329700 -0.906164980 0.2524829000 0.131835750 -0.0520502510 -0.9923324500 -9.871699e-01 -0.98969609 -0.9958206800 -9.909363e-01 -0.9970517 0.8703845100 0.2106970000 0.2637078900 -0.986574420 -0.981761530 -0.9895147800 -0.985032640 -0.973886070 -0.99403493 -0.2575488800 0.0979471090 0.5471510500 -0.952154660 -0.956133970 -0.0884361200 -0.9937256500 -0.9937549500 0.3469885300 -0.980134850 -0.961309440 -1.289889e-01 -0.991990440 -0.99069746 -0.0743230270

2 STANDING 1 0.27841883 -1.641057e-02 -1.235202e-01 -9.982453e-01 -0.975300220 -0.960321990 0.96656113 -0.1415512700 1.093788e-01 -0.9974113 -0.98944741 -0.93163868 0.0740067090 0.0057711041 2.937663e-02 -0.995548140 -0.981063630 -0.99184570 -0.0161116200 -0.083893777 0.1005842900 -0.98311996 -0.989045800 -0.98912123 -0.1105028300 -0.0448187310 -0.0592428220 -0.989872560 -0.99729260 -0.993851000 -0.9792891500 -0.976057070 -0.9792891500 -0.976057070 -0.991253490 -0.9916944100 -0.980683140 -0.983754190 -0.99512320 -0.99610164 -0.997450720 -0.9768517300 -0.97352267 -0.998680260 -0.9749298100 -0.955438110 0.2713085500 0.042863639 -0.0143097550 -0.9950322200 -9.813115e-01 -0.98973975 -0.9966523500 -9.820839e-01 -0.9926268 0.6085135200 -0.0536756130 0.0631482680 -0.977386710 -0.992530030 -0.9896057800 -0.984904340 -0.987168070 -0.98978468 -0.0481674350 -0.4016079100 -0.0681783290 -0.980856620 -0.975865760 -0.0441498870 -0.9903354900 -0.9919602900 0.5320605200 -0.988295550 -0.983321920 -2.719585e-01 -0.995853860 -0.99639947 0.1580745400

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## Aggregating Data by Subject and Activity

## Create the final result - my.tidy.aggr.result - First 2 rows - Total 180 rows

subject activity tBodyAcc-mean()-X tBodyAcc-mean()-Y tBodyAcc-mean()-Z tBodyAcc-std()-X tBodyAcc-std()-Y tBodyAcc-std()-Z tGravityAcc-mean()-X tGravityAcc-mean()-Y tGravityAcc-mean()-Z tGravityAcc-std()-X tGravityAcc-std()-Y tGravityAcc-std()-Z tBodyAccJerk-mean()-X tBodyAccJerk-mean()-Y tBodyAccJerk-mean()-Z tBodyAccJerk-std()-X tBodyAccJerk-std()-Y tBodyAccJerk-std()-Z tBodyGyro-mean()-X tBodyGyro-mean()-Y tBodyGyro-mean()-Z tBodyGyro-std()-X tBodyGyro-std()-Y tBodyGyro-std()-Z tBodyGyroJerk-mean()-X tBodyGyroJerk-mean()-Y tBodyGyroJerk-mean()-Z tBodyGyroJerk-std()-X tBodyGyroJerk-std()-Y tBodyGyroJerk-std()-Z tBodyAccMag-mean() tBodyAccMag-std() tGravityAccMag-mean() tGravityAccMag-std() tBodyAccJerkMag-mean() tBodyAccJerkMag-std() tBodyGyroMag-mean() tBodyGyroMag-std() tBodyGyroJerkMag-mean() tBodyGyroJerkMag-std() fBodyAcc-mean()-X fBodyAcc-mean()-Y fBodyAcc-mean()-Z fBodyAcc-std()-X fBodyAcc-std()-Y fBodyAcc-std()-Z fBodyAcc-meanFreq()-X fBodyAcc-meanFreq()-Y fBodyAcc-meanFreq()-Z fBodyAccJerk-mean()-X fBodyAccJerk-mean()-Y fBodyAccJerk-mean()-Z fBodyAccJerk-std()-X fBodyAccJerk-std()-Y fBodyAccJerk-std()-Z fBodyAccJerk-meanFreq()-X fBodyAccJerk-meanFreq()-Y fBodyAccJerk-meanFreq()-Z fBodyGyro-mean()-X fBodyGyro-mean()-Y fBodyGyro-mean()-Z fBodyGyro-std()-X fBodyGyro-std()-Y fBodyGyro-std()-Z fBodyGyro-meanFreq()-X fBodyGyro-meanFreq()-Y fBodyGyro-meanFreq()-Z fBodyAccMag-mean() fBodyAccMag-std() fBodyAccMag-meanFreq() fBodyBodyAccJerkMag-mean() fBodyBodyAccJerkMag-std() fBodyBodyAccJerkMag-meanFreq() fBodyBodyGyroMag-mean() fBodyBodyGyroMag-std() fBodyBodyGyroMag-meanFreq() fBodyBodyGyroJerkMag-mean() fBodyBodyGyroJerkMag-std() fBodyBodyGyroJerkMag-meanFreq()

1 1 LAYING 0.2215982 -0.040513953 -0.11320355 -0.928056469 -0.836827406 -0.82606140 -0.2488818 0.705549773 0.445817720 -0.8968300 -0.9077200 -0.8523663 0.08108653 3.838204e-03 1.083424e-02 -0.958482112 -0.924149274 -0.95485511 -0.0165530940 -0.064486124 0.1486894363 -0.8735439 -0.951090440 -0.90828466 -0.10727095 -0.04151729 -0.074050121 -0.91860852 -0.96790724 -0.957790160 -0.8419291525 -0.79514486 -0.8419291525 -0.79514486 -0.954396265 -0.92824563 -0.874759548 -0.81901017 -0.96346103 -0.93584098 -0.93909905 -0.867065205 -0.88266688 -0.924437435 -0.833625556 -0.81289156 -1.587927e-01 0.0975348416 0.0894376552 -0.957073884 -0.922462610 -0.94806090 -0.964160709 -0.932217870 -0.960586987 0.13241909 2.451362e-02 0.024387945 -0.85024917 -0.95219149 -0.90930272 -0.8822965 -0.95123205 -0.91658251 -0.003546796 -0.091529131 0.0104581257 -0.861767648 -0.7983009404 0.0864085629 -0.9333003608 -0.92180398 0.2663911542 -0.8621901854 -0.82431944 -0.1397750127 -0.94236695 -0.93266067 0.1764859071

2 2 LAYING 0.2813734 -0.018158740 -0.10724561 -0.974059465 -0.980277399 -0.98423330 -0.5097542 0.752536639 0.646834880 -0.9590144 -0.9882119 -0.9842304 0.08259725 1.225479e-02 -1.802649e-03 -0.985872169 -0.983172541 -0.98844201 -0.0184766067 -0.111800825 0.1448828461 -0.9882752 -0.982291609 -0.96030656 -0.10197413 -0.03585902 -0.070178302 -0.99323585 -0.98956754 -0.988035821 -0.9774354852 -0.97287391 -0.9774354852 -0.97287391 -0.987741696 -0.98551808 -0.950011570 -0.96116405 -0.99176707 -0.98971810 -0.97672506 -0.979800878 -0.98438098 -0.973246482 -0.981025106 -0.98479218 -1.464828e-01 0.2572894655 0.4025325534 -0.985813631 -0.982768250 -0.98619713 -0.987250256 -0.984987393 -0.989345369 0.15980833 1.212064e-01 0.190558218 -0.98643114 -0.98332164 -0.96267189 -0.9888607 -0.98191062 -0.96317422 0.102611319 0.042280668 0.0552985986 -0.975110196 -0.9751213879 0.2662982125 -0.9853741148 -0.98456849 0.3417585745 -0.9721129727 -0.96109838 0.0185644722 -0.99024870 -0.98949266 0.2648015054

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