## Code Book

'activity names' -- six activities (WALKING, WALKING\_UPSTAIRS, WALKING\_DOWNSTAIRS, SITTING, STANDING, LAYING) 'subject' -- ID of volunteers who participate the experiments

The meanings of symbols in column name of column 3-68 are as follows:

't' -- time domain signals

'f' -- frequency domain signals

'Body'-- body

signals

'Gyro' -- gyroscope

'Gravity' -- gravity

'-XYZ' -- denoting 3-axial signals in the X,Y, and Z directions

'Acc' -- denoting acceleration raw signals.

'Gyro'-- denoting gyroscope raw signals

'Jerk'-- denoting Jerk signals

'Mag'-- magnitude of the three-dimensional signals

The meanings of combination of these symbols are as follows:

'tBodyAcc-XYZ' -- time to obtain body accelerometer 3-axial raw signals 'tGravityAcc-XYZ' -- time to obtain gravity acceleration 3-axial raw signals 'tBodyAccJerk-XYZ' -- time to obtain body linear acceleration 3-axial Jerk signals 'tBodyGyro-XYZ' -- time to obtain body gyroscope 3-axial raw signals 'tBodyGyroJerk-XYZ' -- time to obtain angular velocity 3-axial Jerk signals 'tBodyAccMag' -- magnitude of body accelerometer 3-axial raw signals 'tGravityAccMag' -- magnitude of gravity acceleration 3-axial raw signals 'tBodyGyroMag' -- magnitude of body linear acceleration 3-axial Jerk signals 'tBodyGyroJerkMag' -- magnitude of angular velocity 3-axial Jerk signals 'tBodyGyroJerkMag' -- frequency domain signals of body accelerometer 3-axial raw

'fBodyAccJerk-XYZ' --frequency domain signals of body linear acceleration 3-axial Jerk signals

'fBodyGyro-XYZ' --frequency domain signals of body gyroscope 3-axial raw signals 'fBodyAccMag' --frequency domain signals of magnitude of body accelerometer 3-axial raw signals

'fBodyAccJerkMag' --frequency domain signals of magnitude of body linear acceleration 3-axial Jerk signals

'fBodyGyroMag' --frequency domain signals of magnitude of body gyroscope 3-axial raw signals

'fBodyGyroJerkMag' --frequency domain signals of magnitude of angular velocity 3-axial Jerk signals

The set of variables that were estimated from these signals are: 'mean()'- mean value

'std()' - standard deviation