**CODE BOOK**

1.**R script** called *run\_analysis.R* is created .

2.**Datset** is donloaded from link provided.

3.Data from respective files in the folder is assigned to **variables ,**

1)features –features.txt

2)activities-acitivity\_labels.txt

3)subject-test-subject\_test.txt

4)x-test-x\_test.txt

5)y-test-y\_test.txt

6)subject\_train-subject-train.txt

7)x\_train-x\_train.txt

8)y\_train-y\_train.txt

4.**Merges the training and the test sets to create one data set**.

1.x-rbind of x\_train and x\_test

2.y-rbind of y\_train and y\_test

3.subject-rbind of subject\_train and subject\_test

4.merge-cbind of subject ,x,y

**5.Extracts only the measurements on the mean and standard deviation for each measurement**.

Only those columns are selected from merge where standdard deviation and mean are present using select

1. Uses descriptive activity names to name the activities in the data set
2. Acc in column’s name replaced by Accelerometer
3. Gyro in column’s name replaced by Gyroscope
4. BodyBody in column’s name replaced by Body
5. Mag in column’s name replaced by Magnitude
6. words starting with character f in column’s name replaced by Frequency
7. words starting with character t in column’s name replaced by Time
8. lines with mean is replaced by word mean
9. lines with std is replaced by word standard\_deviation

**6.From the data set in step 4, creates a second, independent tidy data set with the average of each variable for each activity and each subject.**

New data set with average of each variable and activity is created-summarisedata, and written in a new file "Avg\_var\_by\_activity.txt"