This the file explain this project.

1. Download the dataset
   i. Download the datasets from this URL.
   ii. description URL
2. Import each data
   i. activities_labels <- activity_labels.txt
      A) 6 rows, 2 columns
      B) List of activities performed when the corresponding measurements were taken and its codes (labels)
   ii. features <- features.txt
      A) 561 rows, 2 columns
      B) The features selected for this database come from the accelerometer and gyroscope 3-axial raw signals tAcc-XYZ and tGyro-XYZ.
   iii. subject_train <- subject_train.txt
      A) 7352 rows, 1 column
      B) contains train data of 21/30 volunteer subjects being observed
   iv. x_train <- train/X_train.txt
      A) 7352 rows, 561 columns
      B) contains recorded features train data
   v. y_train <- train/y_train.txt
      A) : 7352 rows, 1 columns
      B) contains train data of activities'code labels
   vi. subject_test <- test/subject_test.txt
      A) 2947 rows, 1 column
      B) contains test data of 9/30 volunteer test subjects being observed
   vii. x_test <-test/X_test.txt
      A) 2947 rows, 561 columns
      B) contains recorded features test data
   viii. y_test <- test/y_test.txt
      A) 2947 rows, 1 columns
      B) contains test data of activities'code labels
3. Merges the training and the test sets to create one data set
   i. x is created by merging x_train and x_test (10299 rows, 561 columns)
   ii. y is created by merging y_train and y_test (10299 rows, 1 column)

iii. subjectis created by merging subject_train and subject_test (10299 rows, 1 column)

iv. all_data is created by merging Subject, Y and X (10299 rows, 563 column)

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

   i. data is created by subsetting all_data, selecting only columns: subject, code and the measurements on the mean and standard deviation (std) for each measurement(10299 rows, 88 columns)

5. Uses descriptive activity names to name the activities in the data set

   i. Entire numbers in code column of the data replaced with corresponding activity taken from second column of the “activities_labels” variable

6. Appropriately labels the data set with descriptive variable names

   i. code column in data renamed into activities

7. 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

   i. “shaped_data” is created by sumarizing data taking the means of each variable for each activity and each subject, after groupped by subject and activity. (180 rows, 88 columns)

   ii. Export “ShapedData” into “TidyData.csv” file.