## Codebook for run\_analysis.R Created for Coursera Getting and Cleaning Data course project created by Adrienne Lehnert: July 23, 2015

- 1. Load library needed to run script (dplyr)
- 2. Read and find the "mean" and "std" columns desired
  - a. read the "features.txt" file to get the names of variables and store in "features"
  - b. -read the names of activities from "activity\_labels.txt" and store in "activity labels"
  - c. -search for "mean" and "std" in labels and collect/sort column numbers to store in "cols"
- 3. Read training data, labels and subject information from "X\_train.txt", "y\_train.txt", and "subject\_train" and store in "TrainData", "TrainLabels", and "TrainSubject"
- 4. Put training data together into single data frame "TrainData"
  - a. "features" are column names
  - b. add in column with activity labels ("TrainLabels")
  - c. add in column with subject information ("TrainSubject"
- 5. Repeat steps 3-4 with testing data to get the variable "TestData"
- 6. Merge "TrainData" and "TestData" into "Data"
- 7. Reassign the numbers in Data\$Activity to activity labels
- 8. Create tidy data set ("tidyData") that takes the average of every variable for every activity and subject
- 9. Write "tidyData" to text file "Tidy Data.txt"