# Code book

1. Load and unzip the dataset: No variables used here

2. Reading activity and features data

* activityLabels: stores activity labels data
* features: stores features data

3. Extract only mean and standard deviation from features data

* Featuresreq: stores all the feature index with mean and std dev in their associated names
* featuresreq.names : stores all the feature names with mean and std dev in names

4. Load the training datasets

* train: stores X\_train.txt data
* trainActivities: stores Y\_train.txt data
* trainSubjects: stores subject\_train data
* train: Column binds train, trainActivities and trainSubjects

5. Load the test data sets

* test: stores X\_test.txt data
* testActivities: stores Y\_test.txt data
* testSubjects: stores subject\_test data
* test: Column binds test, testActivities and testSubjects

6. Merge and add labels data

* consol\_data: row binds train and test data

7. Fetching activity description from activity labels and ordering columns

* consol\_data\_left: Left joined table with activity label to fetch activity description

8. Create independent tidy data set

* consol\_data\_group: stores grouped data by subject and activity description and summarizes and calculates mean for other columns