**Instructions for run\_analysis.R Script**

1)**Pre-requisites** - Both **dplyr** and **tidyr** package must be installed.

2) Copy the below Project datasets to your work directory -

a)features.txt

b)activity\_labels.txt

c)X\_train.txt

d)x\_test.txt

e)X\_test.txt

f)y\_test.txt

g)subject\_train

h)subject\_test

3) Copy the script **run\_analysis.R** to work directory.

4) Run below commands -

i)source("run\_analysis.R")

ii)final\_ds <- create\_dataset()

4) The final tidy summarized dataset will be present in dataframe - **final\_ds**

**FINAL TIDY DATASET**

The final tidy dataset has below columns -

1) ACTIVITY\_ID - ID for each activity

2) ACTIVITY - Name for the Activity (like Walking,Sitting)

3) SUBJECT - Subject ID who performed the experiment

4) FEATURE - Each Feature or Observation is in separate row for each Activity and Subject.

5) AXIS - Describes the Axis on which the Observation is done if applicable. Each axis observation is in separate row.

6) AVG\_MEAN - AVERAGE of Mean corresponding to each observation type for each subject and Activity.

7) AVG\_STD - AVERAGE of Standard Deviation corresponding to each observation type for each subject and Activity.

8) Snapshot of final dataset is below -

