## CODEBOOK - TIDY DATA

(Generated from accelerometers signals from the Samsung Galaxy S smartphone which contains acceleration/angular velocity data of different subjects performing different activities.)

1. Activityname – Describes the Activity performed by the subject while data was recorded by Smart Phone.

LAYING
SITTING
STANDING
WALKING
WALKING DOWNSTAIRS
WALKING UPSTAIRS

- 2. SubjectCode Identifies the subject for whom data was recorded. There were 30 subjects within an age bracket of 19-48 years. They are numbered from 1 to 30.
- MeanofAccelerationofBodyonXAxisofphoneinTimeDomain Mean of Acceleration of Body on X
   Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across
   different subjects and activities.

Values in the Tidy dataset ranges between 0.00000000 to 0.999999999

4. MeanofAccelerationofBodyonYAxisofphoneinTimeDomain - Mean of Acceleration of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to -0.000000000

5. MeanofAccelerationofBodyonZAxisofphoneinTimeDomain - Mean of Acceleration of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.99999999 to -0.000000000

 StandardDeviationofAccelerationofBodyonXAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

7. StandardDeviationofAccelerationofBodyonYAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

8. StandardDeviationofAccelerationofBodyonZAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.99999999 to 0.999999999

 MeanofAccelerationofGravityonXAxisofphoneinTimeDomain - Mean of Acceleration of Gravity on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.99999999 to 0.999999999

10. MeanofAccelerationofGravityonYAxisofphoneinTimeDomain - Mean of Acceleration of Gravity on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.99999999 to 0.999999999

11. MeanofAccelerationofGravityonZAxisofphoneinTimeDomain - Mean of Acceleration of Gravity on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.99999999 to 0.99999999

12. StandardDeviationofAccelerationofGravityonXAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Gravity on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.000000000

13. StandardDeviationofAccelerationofGravityonYAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Gravity on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.0000000000

14. StandardDeviationofAccelerationofGravityonZAxisofphoneinTimeDomain - Standard Deviation of Acceleration of Gravity on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.0000000000

15. MeanofAccelerationofJerkofBodyonXAxisofphoneinTimeDomain - Mean of Acceleration of Jerk of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between 0.00000000 to 0.999999999

16. MeanofAccelerationofJerkofBodyonYAxisofphoneinTimeDomain - Mean of Acceleration of Jerk of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

17. MeanofAccelerationofJerkofBodyonZAxisofphoneinTimeDomain - Mean of Acceleration of Jerk of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.9999999999

- 18. StandardDeviationofAccelerationofJerkofBodyonXAxisofphoneinTimeDomain Standard Deviation of Acceleration of Jerk of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 19. StandardDeviationofAccelerationofJerkofBodyonYAxisofphoneinTimeDomain Standard Deviation of Acceleration of Jerk of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 20. StandardDeviationofAccelerationofJerkofBodyonZAxisofphoneinTimeDomain Standard Deviation of Acceleration of Jerk of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 21. MeanofAngularvelocityofBodyonXAxisofphoneinTimeDomain Mean of Angular velocity of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 22. MeanofAngularvelocityofBodyonYAxisofphoneinTimeDomain Mean of Angular velocity of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 23. MeanofAngularvelocityofBodyonZAxisofphoneinTimeDomain Mean of Angular velocity of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 24. StandardDeviationofAngularvelocityofBodyonXAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 25. StandardDeviationofAngularvelocityofBodyonYAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 26. StandardDeviationofAngularvelocityofBodyonZAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 27. MeanofAngularvelocityofJerkofBodyonXAxisofphoneinTimeDomain Mean of Angular velocity of Jerk of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.000000000

- 28. MeanofAngularvelocityofJerkofBodyonYAxisofphoneinTimeDomain Mean of Angular velocity of Jerk of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.000000000
- 29. MeanofAngularvelocityofJerkofBodyonZAxisofphoneinTimeDomain Mean of Angular velocity of Jerk of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.000000000
- 30. StandardDeviationofAngularvelocityofJerkofBodyonXAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Jerk of Body on X Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 31. StandardDeviationofAngularvelocityofJerkofBodyonYAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Jerk of Body on Y Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 32. StandardDeviationofAngularvelocityofJerkofBodyonZAxisofphoneinTimeDomain Standard Deviation of Angular velocity of Jerk of Body on Z Axis of phone in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 33. MeanofMagnitudeofAccelerationofBodyinTimeDomain Mean of Magnitude of Acceleration of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  - Values in the Tidy dataset ranges between -0.99999999 to 0.999999999
- 34. StandardDeviationofMagnitudeofAccelerationofBodyinTimeDomain Standard Deviation of Magnitude of Acceleration of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 35. MeanofMagnitudeofAccelerationofGravityinTimeDomain Mean of Magnitude of Acceleration of Gravity in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  - Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 36. StandardDeviationofMagnitudeofAccelerationofGravityinTimeDomain Standard Deviation of Magnitude of Acceleration of Gravity in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

- 37. MeanofMagnitudeofAccelerationofJerkofBodyinTimeDomain Mean of Magnitude of Acceleration of Jerk of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 38. StandardDeviationofMagnitudeofAccelerationofJerkofBodyinTimeDomain Standard Deviation of Magnitude of Acceleration of Jerk of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 39. MeanofMagnitudeofAngularvelocityofBodyinTimeDomain Mean of Magnitude of Angular velocity of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 40. StandardDeviationofMagnitudeofAngularvelocityofBodyinTimeDomain Standard Deviation of Magnitude of Angular velocity of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 41. MeanofMagnitudeofAngularvelocityofJerkofBodyinTimeDomain Mean of Magnitude of Angular velocity of Jerk of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 42. StandardDeviationofMagnitudeofAngularvelocityofJerkofBodyinTimeDomain Standard Deviation of Magnitude of Angular velocity of Jerk of Body in Time Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 43. MeanofAccelerationofBodyonXAxisofphoneinFrequencyDomain Mean of Acceleration of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 44. MeanofAccelerationofBodyonYAxisofphoneinFrequencyDomain Mean of Acceleration of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.
  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 45. MeanofAccelerationofBodyonZAxisofphoneinFrequencyDomain Mean of Acceleration of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 46. StandardDeviationofAccelerationofBodyonXAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

Values in the Tidy dataset ranges between -0.999999999 to 0.9999999999

- 47. StandardDeviationofAccelerationofBodyonYAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 48. StandardDeviationofAccelerationofBodyonZAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 49. MeanFrequencyofAccelerationofBodyonXAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.99999999
- 50. MeanFrequencyofAccelerationofBodyonYAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 51. MeanFrequencyofAccelerationofBodyonZAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 52. MeanofAccelerationofJerkofBodyonXAxisofphoneinFrequencyDomain Mean of Acceleration of Jerk of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 53. MeanofAccelerationofJerkofBodyonYAxisofphoneinFrequencyDomain Mean of Acceleration of Jerk of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 54. MeanofAccelerationofJerkofBodyonZAxisofphoneinFrequencyDomain Mean of Acceleration of Jerk of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

- 55. StandardDeviationofAccelerationofJerkofBodyonXAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Jerk of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 56. StandardDeviationofAccelerationofJerkofBodyonYAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Jerk of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 57. StandardDeviationofAccelerationofJerkofBodyonZAxisofphoneinFrequencyDomain Standard Deviation of Acceleration of Jerk of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.000000000
- 58. MeanFrequencyofAccelerationofJerkofBodyonXAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Jerk of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 59. MeanFrequencyofAccelerationofJerkofBodyonYAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Jerk of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 60. MeanFrequencyofAccelerationofJerkofBodyonZAxisofphoneinFrequencyDomain Mean Frequency of Acceleration of Jerk of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 61. MeanofAngularvelocityofBodyonXAxisofphoneinFrequencyDomain Mean of Angular velocity of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 62. MeanofAngularvelocityofBodyonYAxisofphoneinFrequencyDomain Mean of Angular velocity of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

- 63. MeanofAngularvelocityofBodyonZAxisofphoneinFrequencyDomain Mean of Angular velocity of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 65. StandardDeviationofAngularvelocityofBodyonYAxisofphoneinFrequencyDomain Standard Deviation of Angular velocity of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 67. MeanFrequencyofAngularvelocityofBodyonXAxisofphoneinFrequencyDomain Mean Frequency of Angular velocity of Body on X Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.99999999
- 68. MeanFrequencyofAngularvelocityofBodyonYAxisofphoneinFrequencyDomain Mean Frequency of Angular velocity of Body on Y Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 69. MeanFrequencyofAngularvelocityofBodyonZAxisofphoneinFrequencyDomain Mean Frequency of Angular velocity of Body on Z Axis of phone in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 70. MeanofMagnitudeofAccelerationofBodyinFrequencyDomain Mean of Magnitude of Acceleration of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

- 71. StandardDeviationofMagnitudeofAccelerationofBodyinFrequencyDomain Standard Deviation of Magnitude of Acceleration of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 73. MeanofMagnitudeofAccelerationofJerkofBodyinFrequencyDomain Mean of Magnitude of Acceleration of Jerk of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 74. StandardDeviationofMagnitudeofAccelerationofJerkofBodyinFrequencyDomain Standard Deviation of Magnitude of Acceleration of Jerk of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 75. MagnitudeofAccelerationofJerkofBodyinFrequencyDomain Magnitude of Acceleration of Jerk of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 76. MeanofMagnitudeofAngularvelocityofBodyinFrequencyDomain Mean of Magnitude of Angular velocity of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 77. StandardDeviationofMagnitudeofAngularvelocityofBodyinFrequencyDomain Standard Deviation of Magnitude of Angular velocity of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 78. MeanFrequencyofMagnitudeofAngularvelocityofBodyinFrequencyDomain Mean Frequency of Magnitude of Angular velocity of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities.

  Values in the Tidy dataset ranges between -0.999999999 to 0.999999999

- 80. StandardDeviationofMagnitudeofAngularvelocityofJerkofBodyinFrequencyDomain Standard Deviation of Magnitude of Angular velocity of Jerk of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999
- 81. MeanFrequencyofMagnitudeofAngularvelocityofJerkofBodyinFrequencyDomain Mean Frequency of Magnitude of Angular velocity of Jerk of Body in Frequency Domain. The Tidy dataset gives the average of the above measure across different subjects and activities. Values in the Tidy dataset ranges between -0.999999999 to 0.999999999