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title: smartphone-codebook
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This is a codebook describing the variables in the tidy dataset 'smartphone-tidydata.txt'.

The dataset has 181 rows and 88 columns.
The first row has all the column names.
The remaining 180 rows are divided as 6 rows per subject / volunteer.
There were 30 subjects thus: 30 x 6 rows = 180 rows.

Column 1: "subjectId" This gives the ID number of one of 30 subjects / volunteers in the project.

Column 2: "activity_label" This is the descriptive activity label for each of 6 distinct activities identified for each subject by the software written by the original project team.

Column 3 through Column 88 : each of these columns specify either mean or standard deviations of parameters calculated from the raw data.
e.g.: column 3: "tBodyAcc-mean()-X" is likely the mean acceleration of each subject's body in the X direction
column 4: "tBodyAcc-mean()-Y" is likely the mean acceleration of each subject's body in the Y direction

In general, there are two types of parameters: those derived from the accelerometer contain the abbreviation "Acc" in their name, while the parameters obtained from the gyroscope contain the abbreviation "Gyro" or "angle" in their names.

Also, each parameter originally measured as a time-series contains a 't' in its name e.g. "tBodyAcc-mean()-X". Each of these time-domain parameters have been Fourier transformed to give a frequency domain parameter. These frequency domain parameters contain an 'f' in their names. e.g. "fBodyAcc-mean()-X"

Accelerometer data is further subdivided into gravitational acceleration (contains 'grav' in name) and body acceleration (contains "BodyAcc" in name).