MainFinal contains 3 lines to load data:

* Ppg\_data for raw data from the mg
* Reconstruct\_ppg for data generated from waveletFinale
* Ecg\_data from the portable ecg

The file also contains 3 major functions to acquire heart rate from these datasets

* convertECG takes in ecgData and the sample subset where testing takes place (test subsets are located in ECG data cuts file within data folder)
* peakDetect takes in reconstructed data, though could be applied to any dataset with a change to the metrics
* freqAnalysis takes in ppg\_data

An additional file WaveletFinale takes in raw data and applies a wavelet transform followed by inserting the output into Independent Component Analysis, which generates 5 possible heart rate signals.

* I believe that I had make a mistake taking ICA over principle component analysis, as it would only generate the principal component, as opposed to the current method which requires sifting through the outputs to decide which components should be saved as Reconstructed\_ppg, definitely consider replacing this step with that alternative method and hopefully it works better.