In this task it was nearly impossible to make use of the raw ecg signal as a feature mainly because the signal itself is too long and each individual has different length signals. Thus, we used the biosppy library in python to manually generate feature vectors for each individual of the same entries and dimensions. We first had to segment the raw ecg signal to get rpeak locations and heartbeat template sequences for each individual for which we used Hamilton Segmenter. The main reason was that it provided sufficiently discriminative segmentations while not failing to detect any rpeaks or heartbeat templates unlike certain other segmenters. Then, for each individual, we extracted various statistics for rpeak locations such as the min, median, max, mean or the variance of the rpeak duration intervals which in the last case corresponded to heartrate variability. Similarly, from the heartbeat templates, we aggreagated the same statistics for the rpeak amplitudes, qpeaks amplitudes, both over different templates and over the same points in the same template separately. Finally, we also added the median of the heart beat templates which were of the same size for all samples, as a final feature, yielding a feature vector of size 205. Our strategy in classification was to first classify class1 vs rest. We have then used an ensemble of xgboost models, allowing us to find optimal hyperparameters via gridsearch scored with f1 score and also making use of gradient boosting for improved results at the same time. Then after predicting class 3 samples, we classified rest of the test samples again by training an xgboost ensemble.