CS771:Machine learning: tools, techniques, applications
Project problems

1. This problem is concerned with first isolating and then classifying heart sounds. It was a challenge task at AISTATS 2012. The details and the training and testing data sets are at: http://www.peterjbentley.com/heartchallenge/

   You have to attempt both challenge 1 and challenge 2 mentioned at the above URL.

2. This problem is based on the *movielens* data set available at: http://www.grouplens.org/system/files/ml-100k-README.txt

   You have to build a system that predicts for an unknown user (whose simple demographics are available):

   (a) Whether the user is likely to see a given movie.
   (b) And if the answer to 2a is 'yes' then the star rating (on a scale of 1 to 5) that the user will give to the movie.

3. The problem here is to recognize hand printed English characters and numerals (26 upper case, 26 lower case, 10 numerals). There are 62 classes and 55 samples of each class. Build a classifier that will classify these characters. The data set is available from the ftp site under the project sub-directory - file name prob3Dataset.zip. The reference is: http://mldata.org/repository/data/viewslug/chars74k-english-hnd/

Each group should choose one of the three problems above and inform me by sending an email to hk@cse.iitk.ac.in with the following structure.

Group No.:< your group no. >
Problem No.:< your problem no. >

Your problem selection should reach me by Mon. 26/8/13 midnight.