Homework

Experiment

How do we represent sounds in order to recognize them? For instance, when taking a walk near a lake, how do you recognize a sound to be a quack of a duck and another to be the chirp of a frog? One extreme possibility is that we encode sounds as collections of little snippets, without worrying too much about the temporal order of these snippets. It is quite likely that this hypothesis is too simple minded to be correct – temporal order seems to be quite important for auditory recognition. However, it is still interesting to ask how much can we accomplish even when the temporal order is incorrect? This experiment investigates this question. Your task will be to collect a set of sound clips from the web or CD ROMs. You will then reverse these sound files to play them backwards (easily done in Matlab). You will determine how accurate listeners are at identifying these sounds relative to their accuracy with the non-reversed sounds.