## Homework #1 (1)

- Due date: Feb. 20 (Sun.) 23:59 p.m.
- Submission:
  - Filename format: WORD

學號\_hwNo.docx

例如: M06455505\_hw1.docx

- Problems:
  - 1. Find and correct the mistakes in the ARPAbet transcriptions of the following words:
    - a) three [dh r i]
    - b) sing [s ih n g]
    - c) eyes [ay s]
    - d) study [s t uh d i]
    - e) though [th ow]
    - f) planning [p pl aa n ih ng]
    - g) slight [s l iy t]

# Homework #1 (2)

#### • Problems:

- 2. Transcribe the following words into the ARPAbet.
  - a) Red
  - b) blue
  - c) green
  - d) yellow
  - e) black
  - f) white
  - g) orange
  - h) purple
  - i) dark
  - j) suit
  - k) greasy
  - 1) wash
  - m) water

## Homework #1 (3)

#### • Problems:

- 3. Transcribe the following two wavefiles at the word level (that is, write down the words that occur in the utterance). Make sure to listen to them carefully and more than one time. If you have trouble listening to them, let us know immediately. Try to transcribe any word fragments you hear. E.g. if the word should be "having" and the speaker drops the final syllable you might transcribe it as "hav—"
  - a) Utterance from Boston Radio News Corpus
  - b) Utterance from Switchboard corpus

## Homework #1 (4)

#### Problems:

4. Now open both les in Praat, the speech analysis program. Transcribe both les into the ARPAbet, using Praat to help you play pieces of each wavfile, and to look at the wavefile and the spectrogram. (In fact, you can use Praat to play the files for the previous exercise as well).

Turn in the ASCII ARPAbet sequences for the two files (just type it into your homework answers). For the Switchboard file, also label the start and end and identity of each phone using the "Annotate" - "To Text Grid", with just one tier for "phone" (you don't need to use a word tier). Include a picture of this Praat labeled file using the "Draw" window (select the Sound and TextGrid, then click Draw, then save as EPS. Convert the file PDF before you attach it.) (If the file is too long to read the fonts clearly in the "draw" window, just break it into 2 or 3 parts and attach separate pictures). This is very hard, so I don't expect you to be perfect, I just want to you try to listen carefully for what's happening in each file.

PR-SLP