Assignment 1

Problem 1

Transcribe into ARPAbet symbols each of the following (note: if there is more than one pronunciation of the word, give ARPAbet pronunciations for the multiple pronunciations):

(a) monosyllabic words: why, what, how

(b) bi-syllabic words: family (pronounced as a 2-syllable word), welcome

(c) tri-syllabic word: family (pronounced as a 3-syllable word)

(d) sentence: My name is Fred.

Problem 2

(a) Write out the phonetic transcription for the following words: /she/, /eats/, /some/, /meat/

(b) What effect occurs when these four words are spoken in sequence in a sentence? What implication does this have for speech segmentation of a sentence into words?

Problem 3

Write a Python command line application to syllabify your English pronunciations using ARPABET syllabification. It will take an ARPABET transcription in array or string form and return a list with the syllables chunked. The minimum is for 100 predefined words. You can also consult CMU dictionary as in:

http://svn.code.sf.net/p/cmusphinx/code/trunk/cmudict/cmudict-0.7b

Make sure to validate the command line input and maintain it to find the resulted word.

Example:

Input: /W/ /AY/

Output: Why