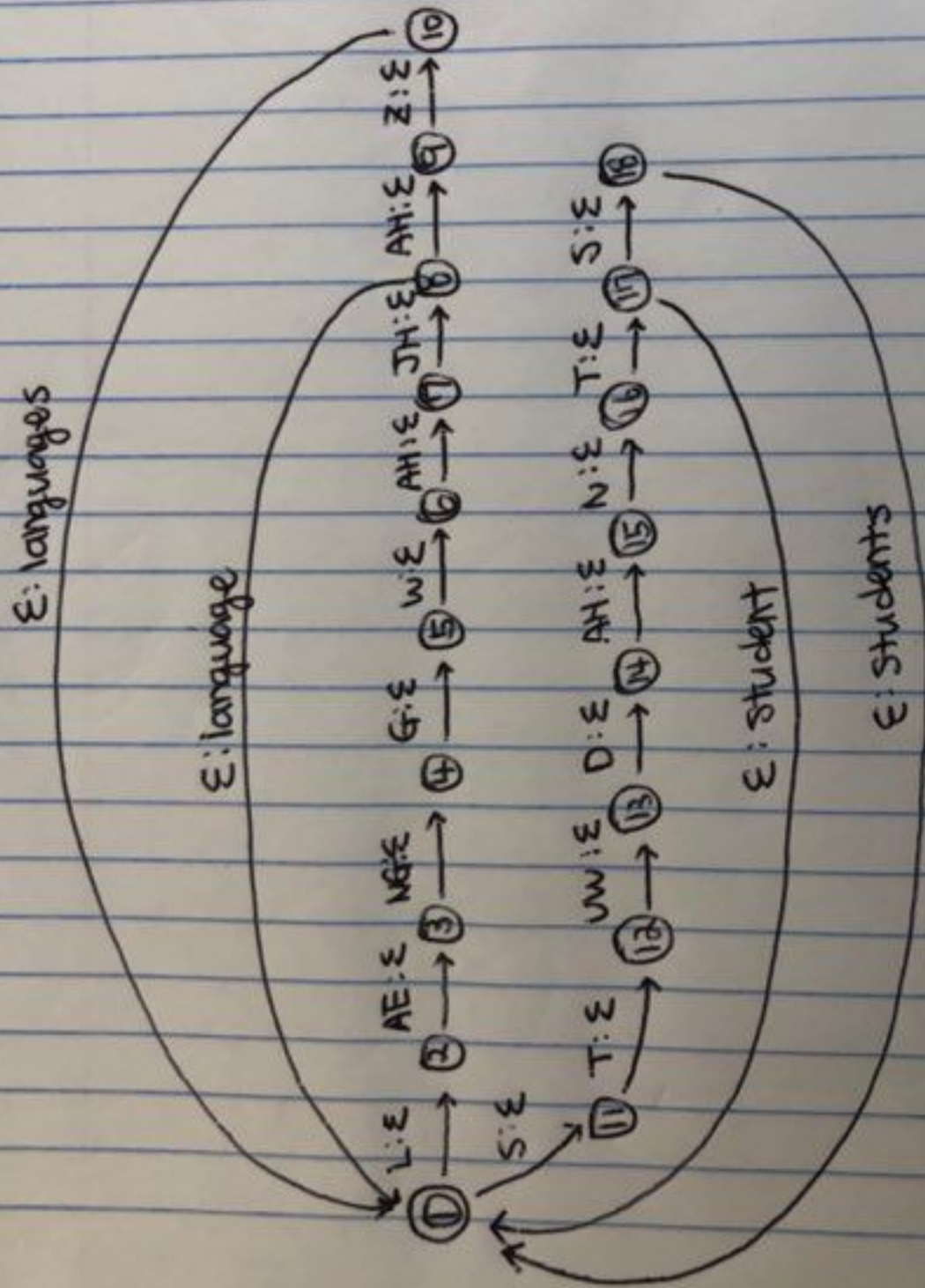


LIN 11717 (Seungminup Alex Oh 916201993)

Part 1.





## Part 2.

- transition (1, L, 2, eps).
- transition (2, AE, 3, eps).
- transition (3, NG, 4, eps).
- transition (4, G, 5, eps).
- transition (5, W, 6, eps).
- transition (6, AH, 7, eps).
- transition (7, JH, 8, eps).
- transition (8, AH, 9, eps).
- transition (9, Z, 10, eps).
- transition (8, eps, 1, language).
- transition (10, eps, 1, languages).
- transition (1, S, 11, eps).
- transition (11, T, 12, eps).
- transition (12, VW, 13, eps).
- transition (13, D, 14, eps).
- transition (14, AH, 15, eps).
- transition (15, N, 16, eps).
- transition (16, T, 17, eps).
- transition (17, S, 18, eps).
- transition (17, eps, 1, student).
- transition (18, eps, 1, students).
- initial (1).
- final (1).

## Part 3.

- (i)  $W = [eye, scream]$   
 $W = [eye, scream]$   
 $W = [ice, cream]$   
 $W = [ice, crene]$   
 $W = [i, scream]$   
 $W = [ai, scream]$

(ii)  $Fst(T, [computational, linguistics])$ .

$T = [k, aa, m, p, y, uw, t, eɪ, ʃn, əh, n, əh, l, l, ih, nɔ, ɡ, ɡ, w, ih, s, t, ih, k, s]$ ,  
 $ih, s, t, ih, k, s]$ .

$fst([k, aa, m, p, y, uw, t, eɪ, ʃn, əh, n, əh, l, l, ih, nɔ, ɡ, ɡ, w, ih, s, t, ih, k, s]$ ,  
 $W)$ .

$W = [comp, u, tɔ, ʃn, uɪ, lɪŋɡ, wɪs, tɪks]$ ;

;

⇒ long lists of  $W$  are generated which represents sequences of English words that sound like "computational linguistics".  
 - English words that correspond to the pronunciation from  $T$ .  
 the results describes that it is hard to recognize speech since there are so many words that have similar / some pronunciations and it is illustrated by long lists of  $W$ . Also, there can be multiple synthesis of words in one given word because of pronunciation synthesis.