

(1) Fill in the CKY table to parse the sentence “I can can a can”, indicating the origin of each entry and weight.

(2) Draw the resulting parse trees with their final weights.

(3) Is it possible to add or remove one rule to have only one resulting parse tree? If it is, what is the rule?

S → NP VP	1.0	NP → NP NP	0.2	DT → a	1.0
VP → VP VP	0.2	NP → DT NP	0.4		
VP → VP NP	0.5	NP → I	0.3	T = {S, VP, NP, DT}	
VP → can	0.3	NP → can	0.1	N = {I, can, a}	

	I	can	can	a	can
	1	2	3	4	5
0					
1					
2					
3					
4					