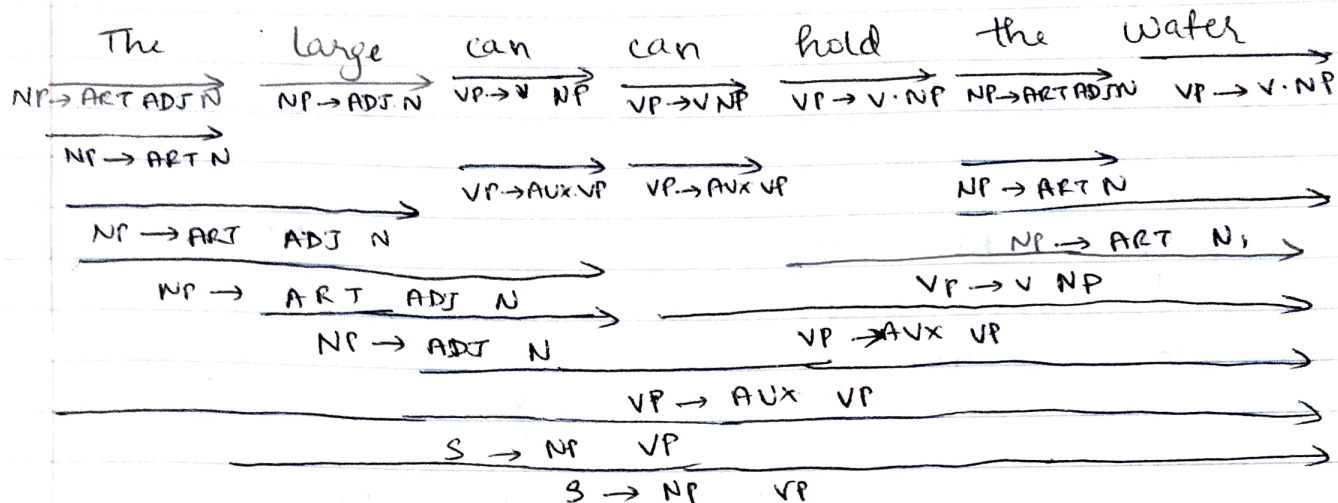


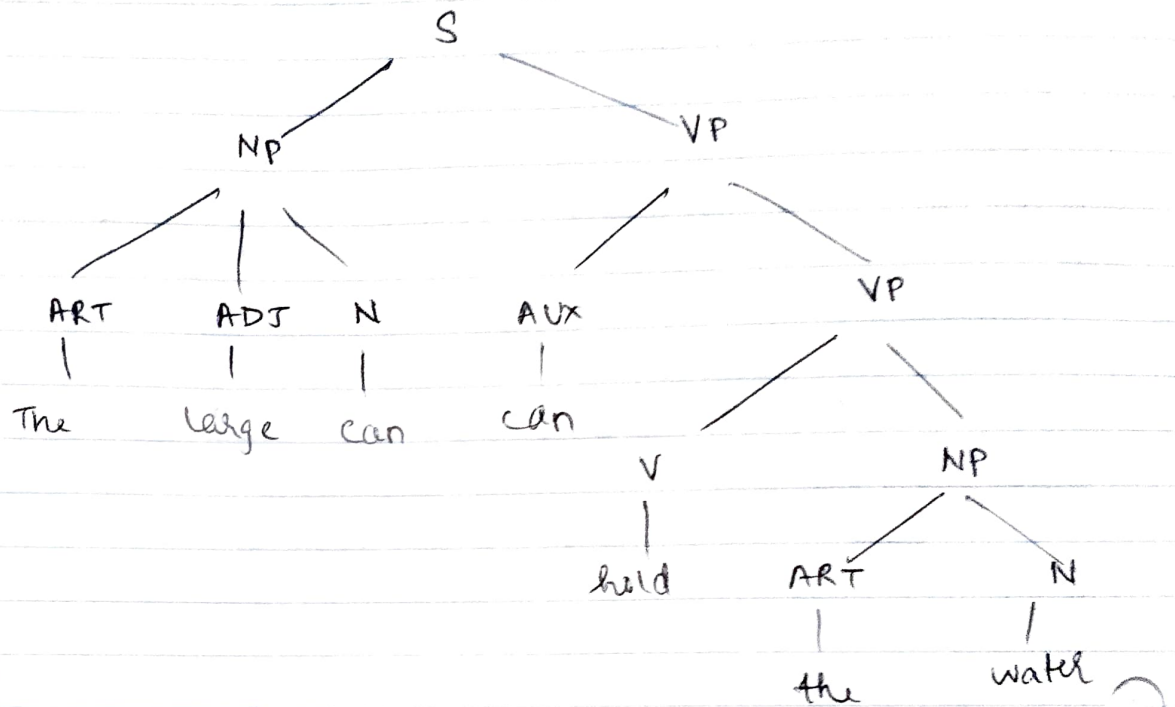
Homework - 5

Chart Parsing



$S_1 \rightarrow NP_1 VP_2$						
$S_2 \rightarrow NP_2 \cdot VP_2$						
$NP_2 \rightarrow ADJ_1 N_1$			$VP_2 \rightarrow AUX_2 VP_1$			
$NP_1 \rightarrow ART_1 ADJ_1 N_1$			$VP_1 \rightarrow V_3 NP_3$			
		V_1	V_2		$NP_3 \rightarrow ART_2 N_4$	
		AUX ₁	AUX ₂	V_3		V_4
ART ₁	ADJ ₁	N_1	N_2	N_3	ART ₂	N_4
The	large	can	can	hold	the	water

Parse tree



2. Statistical Parsing

The	flight	includes	a	meal.
Det: 0.4 [0, 1]	NP: 0.0024 [0, 2]	[0, 3]	[0, 4]	S: 2.304×10^{-8} [0, 5]
	N: 0.02 [1, 2]	[1, 3]	[1, 4]	[1, 5]
		V: 0.05 [2, 3]	[2, 4]	NP: 1.2×10^{-5} [2, 5]
			Det: 0.4 [3, 4]	NP: 0.0012 [3, 5]
				N: 0.01 [4, 5]