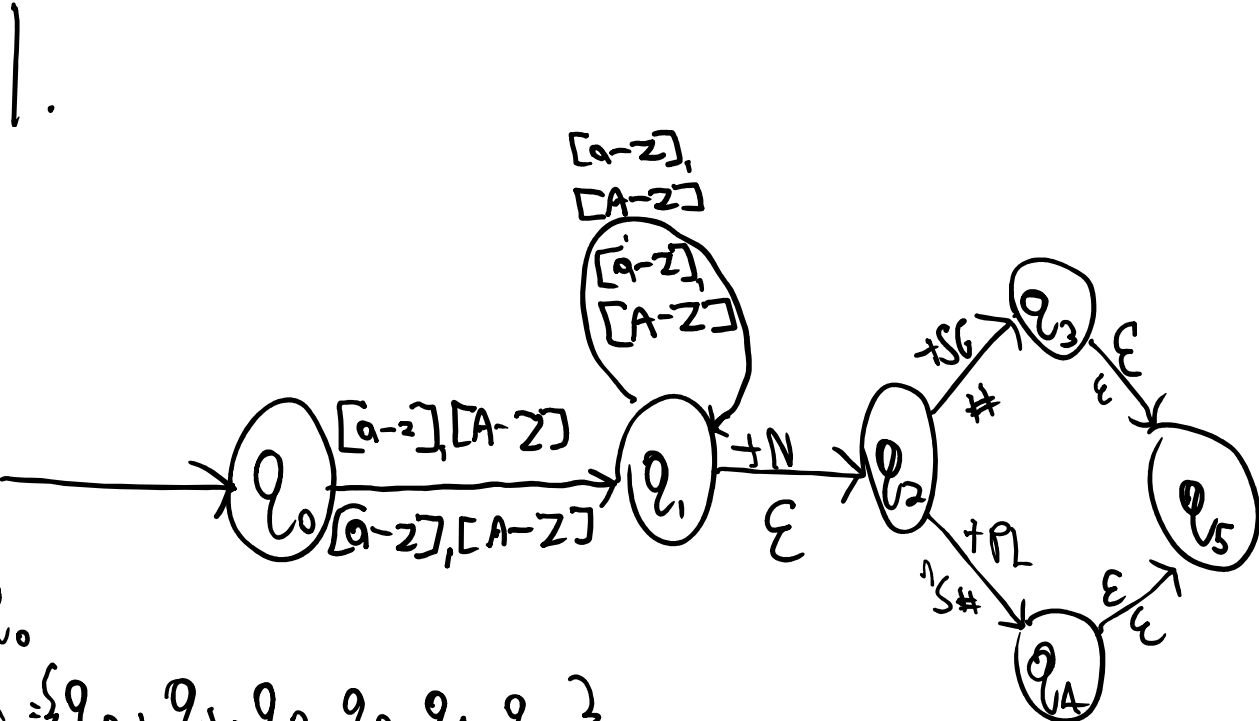


Homework 2

 q_0

$$Q = \{q_0, q_1, q_2, q_3, q_4, q_5\}$$

$$\Sigma = \{[a-z], [A-Z], +N, +SG, +PL, \epsilon\} \quad \Delta = \{[a-z], [A-Z], \epsilon, ^s\#, \#\}$$

$$F = \{q_5\}$$

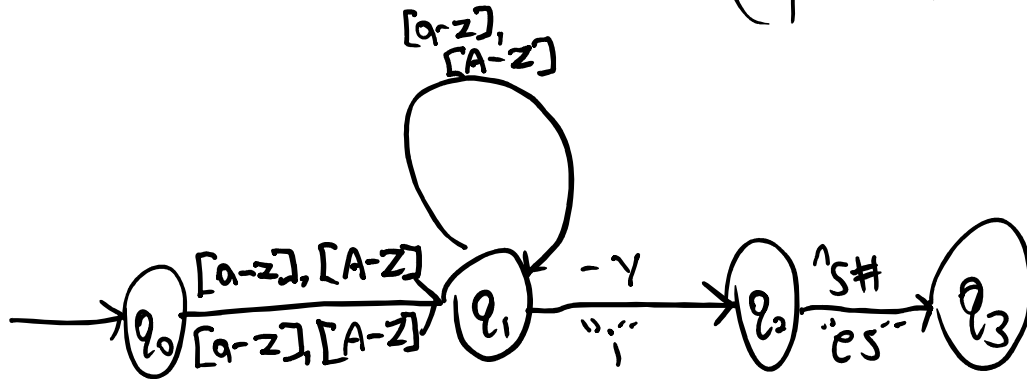
 $\delta =$

	[a-z]	[A-Z]	+N	+SG	+PL	ϵ
0	1	1	-	-	-	-
1	1	1	2	-	-	-
2	-	-	-	3	4	-
3	-	-	-	-	-	5
4	-	-	-	-	-	5
5	-	-	-	-	-	-

 $T =$

	[a-z]	[A-Z]	+N	+SG	+PL	ϵ
0	[a-z]	[A-Z]	-	-	-	-
1	[a-z]	[A-Z]	ϵ	-	-	-
2	-	-	-	#	$^s\#$	-
3	-	-	-	-	-	ϵ
4	-	-	-	-	-	ϵ
5	-	-	-	-	-	-

2.

(- γ = if γ is last character) q_0

$$Q = \{q_0, q_1, q_2, q_3\}$$

$$\Delta = \{[a-z], [A-Z], "i", "es"\}$$

$$\Sigma = \{[a-z], [A-Z], -\gamma, ^s\# \}$$

$$F = \{q_3\}$$

$$\delta =$$

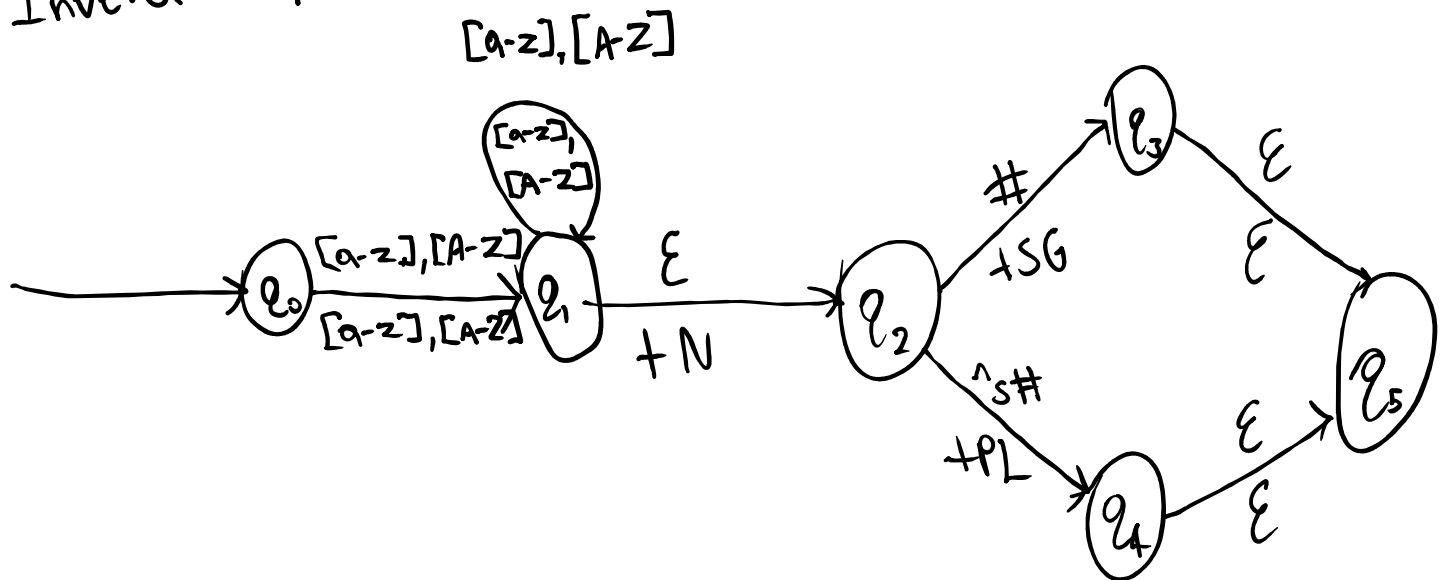
	[a-z]	[A-Z]	- γ	$^s\#$
0	1	1	-	-
1	1	1	2	-
2	-	-	-	3
3	-	-	-	-

$$T =$$

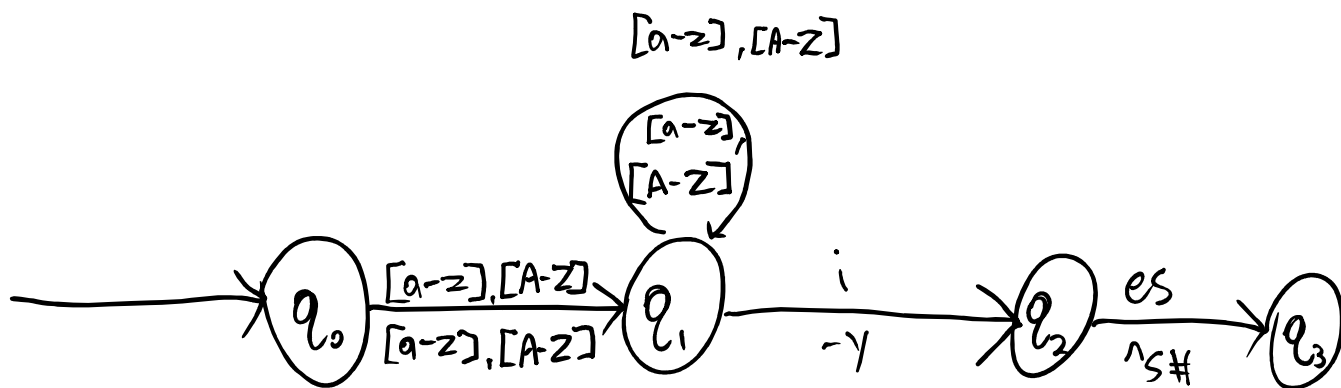
	[a-z]	[A-Z]	- γ	$^s\#$
0	[a-z]	[A-Z]	-	-
1	[a-z]	[A-Z]	"i"	-
2	-	-	-	"es"
3	-	-	-	-

3.

Inversion 1:



Inversion 2:



4.

 $[d] = \{a, e, i, o, u, w, y\}$ $[c3] = \{t\}$ $[c6] =$ $[c1] = \{b, f, p, v\}$ $[c4] = \{l\}$ $\{o\}$ $[c2] = \{c, g, j, k, q, s, x, z\}$ $[c5] = \{m, n\}$ 