

Soln $A = [0/1] [0^*1^*0]^* 0^*1$

What is a comment?

$/- \text{stuff} -/$ (- to avoid *)

$a \equiv$ any char including

so, $/- a^* -/$ is a comment, yes?

Great let's make a comment FSA



done? wait -

a was any char, so we have a non-deterministic FSA

? Well we didn't really mean any char we meant any but -
 $b \equiv$ any char but -

$/- 3-1=2 -/$ not a comment!

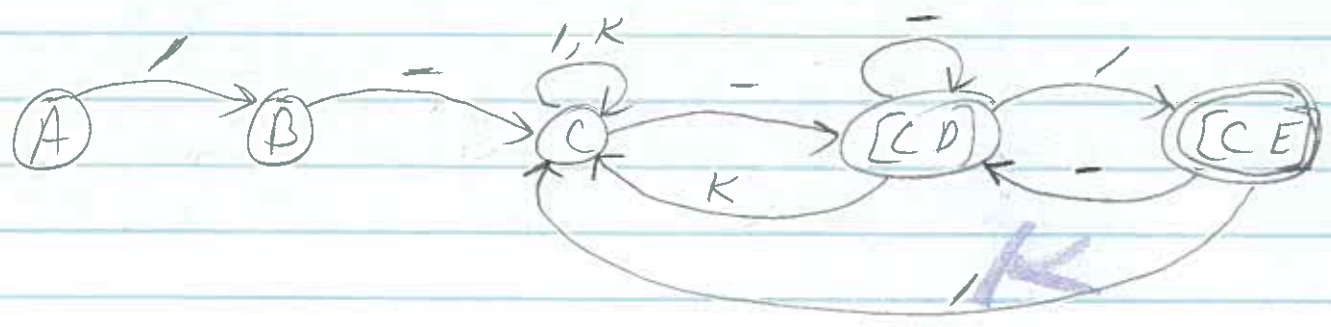
OOOPS

Let's do this more carefully

eliminate non-determinism

alphabet = { /, -, k }
k = any char but / or -

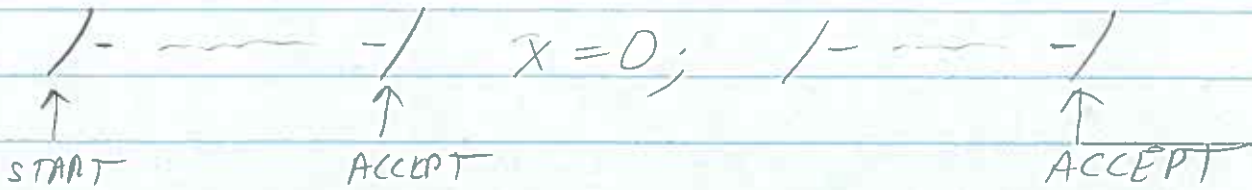
	/	-	k
A	B		
B		C	
C	C	[CD]	C
[CD]	[CE]	[CD]	C
[CE]	C	[CD]	C



Has interesting property



Worse still:



That's really not what we want

LEX

matches the longest string
(and "good thing, too!")

$$ID = \text{letter} [\text{letter} / \text{digit}]^*$$

$$\underline{foo} = 3$$

↳ could accept just this!

What do we do?

Let's edit the DFA we got from

$$/ - [k | - | i]^* - /$$



ACCEPT shortest comment

o) let unique start & stop states

88.2

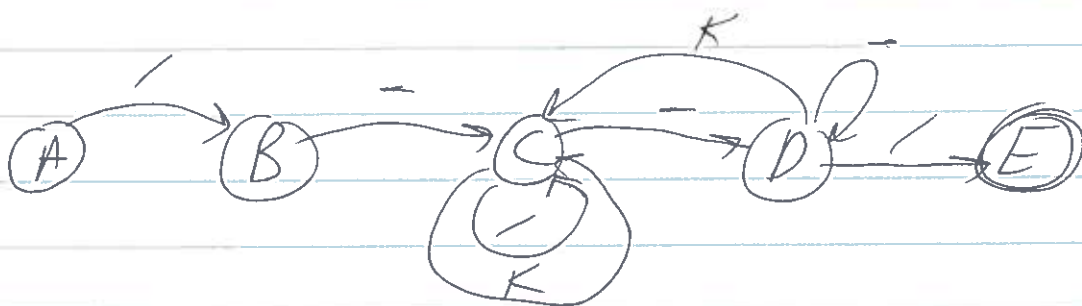
T1



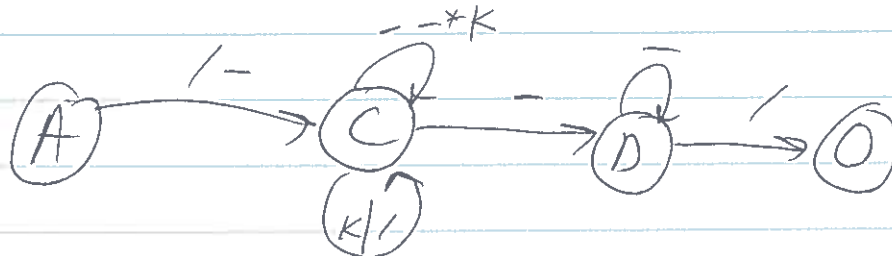
T2

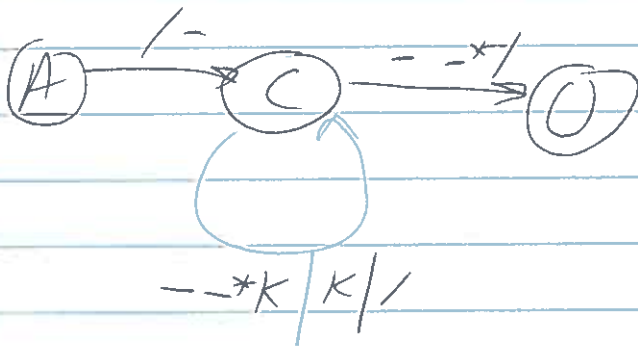


T3

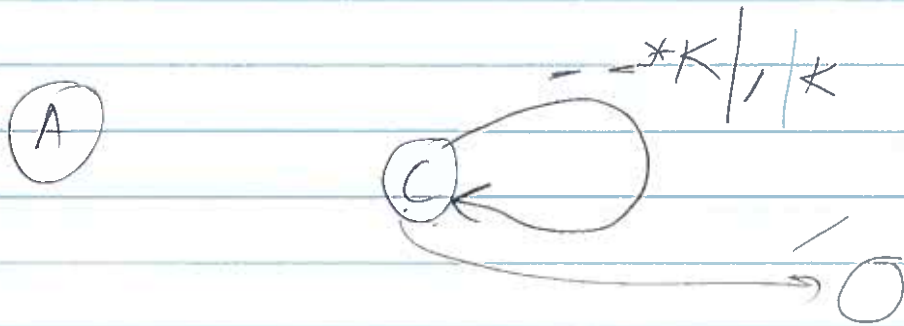
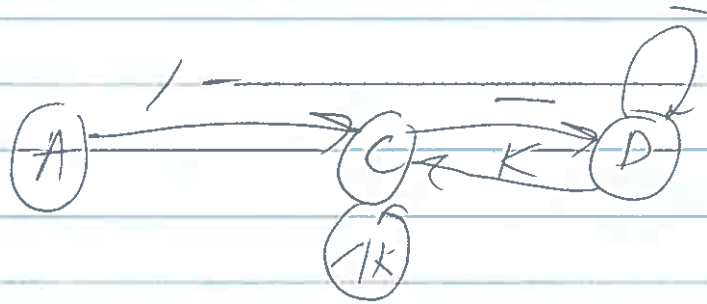


C-D-C





$$1 - (---*K|K|/)^* - -*/$$



1 - - - *K

