

COMP 455
Models of Languages and Computation
Fall 2021
Homework 3
Due Monday, September 13, 2021

1. Construct a deterministic finite automaton accepting all and only strings in the language represented by the following regular expression:

$(ab)^*(bc)^*$

Your automaton should have at most five states.

For this homework you may work in groups of up to four people and groups are encouraged to turn in only one paper with everyone's names in the group on it. This will make the work of the grader easier. However, people in different groups may not collaborate.

Those who want to be part of a group and can't find others may meet in the front after class and form groups, if you desire to. You may also send email to the TA and he will assign people to groups.