Homework #9

1. Write a non-deterministic automaton that accepts the language where i) \( \Sigma = \{a, b, c\} \); and ii) all strings contain any number of symbols, an \( a \), any number of symbols, and end with a \( b \).

2. What is the regular expression that corresponds to this automaton?

3. Use the algorithm we gave to write a right-linear grammar for this language (converting from the non-deterministic automaton above).

4. Extra for honors section: use the algorithm we gave to determinize this automaton.

Things to keep in mind:

a. This is due by the beginning of class on Apr. 4!

b. Type it.

c. This can be no more than two double-spaced pages (two and a half for honors section).

d. Keep in mind that there are funny symbols here you may never have used or printed before. Leave time to make sure you have that right so that you can get this in on time.