Worksheet 11: Encodings of Other Objects

Computer Science 311
Spring 2016

Exercise 1 Let $\text{LOOP}_{\text{NFA}} = \{\langle N \rangle \mid N$ is an NFA that contains a loop$\}$. Show that LOOP_{NFA} is decidable.

Exercise 2   Let $\text{FINITE}_{\text{DFA}} = \{\langle D \rangle \mid D \text{ is a DFA and } L(D) \text{ is finite}\}$. Show that $\text{FINITE}_{\text{DFA}}$ is decidable.