

CSCI 361: Exercise # 7

Your Name: _____

Due: Tuesday, Sep 30, in class

Assigned reading for this lecture:

- Sipser Third Edition Chap 2.2 (Push-down Automata)

Questions:

1. In Definition 2.13, the transition function of a push-down automata is defined as

$$\delta: Q \times \Sigma_{\varepsilon} \times \Gamma_{\varepsilon} \longrightarrow \mathcal{P}(Q \times \Gamma_{\varepsilon})$$

Describe this transition informally in English using the stack and "push" and "pop" terminology.

2. Consider the PDA in Figure 2.15. What is the significance of the \$ tape symbol?