# CS 435 Theory of Computation Homework 6

# (Submit to D2L Assignments by 11:00AM 4/17/2024)

### Part I. Exercise (Not to submit – you are encouraged to post solutions to D2L Discussions.)

- 1 Provide the formal description, in terms of  $M = (K, \Sigma, \Gamma, \Delta, s, A)$ , for the PDA in Example 12.10 on page 189 of the textbook.
- 2 Exercise 1a of Chapter 12
- 3 Exercise 1e of Chapter 12
- 4 Exercise 1j of Chapter 12
- 5 Exercise 4 of Chapter 12

#### Part II. (20 points – submit to D2L Assignments)

# You may use JFLAP, any drawing tool, or your hand drawing to create the diagrams for submission.

- 1 (5pts) Exercise 1b of Chapter 12. Show the diagrams of the PDAs.
- 2 (5pts) Exercise 1d of Chapter 12. Show the diagrams of the PDAs.
- 3 (5pts) Exercise 1h of Chapter 12. Show the diagrams of the PDAs.
- 4 (5pts) Exercise 1k of Chapter 12. Show the diagrams of the PDAs.