

Homework 5, ENEE641, Fall 2018

Due: October 24, in class.

Ex. 14.1-6, p. 307 [p. 345 in 3rd edition]

Ex. 15.2-4 and 15.2-5, p. 338-9 [Ex. 15.2-5 and 15.2-6 p. 378 in 3rd edition]

Ex. 15.4-5, page 356 [p. 397 in 3rd edition]

[Problem 15-2, p. 405 in 3rd edition]: **15-2 Longest *palindrome subsequence***

A ***palindrome*** is a nonempty string over some alphabet that reads the same forward and backward. Examples of palindromes are all strings of length 1, civic, racecar, and aibohphobia (fear of palindromes).

Give an efficient algorithm to find the longest palindrome that is a subsequence of a given input string. For example, given the input character, your algorithm should return carac. What is the running time of your algorithm?