Homework 1. Due: Monday, January 13, 2019, 11:55pm EST via Gradescope.

## Problem 1 [DPV] 6.2 – Hotel stops with minimum penalty.

(a) Define the entries of your table in words. E.g., T(i) or T(i, j) is ....

(b) State recurrence for entries of table in terms of smaller subproblems (and give a brief explanation in words).

(c) Write pseudocode for your algorithm to solve this problem.

(d) Analyze the running time of your algorithm.

## Problem 2 [DPV] 6.3 – Yuckdonald's

(a) Define the entries of your table in words. E.g., T(i) or T(i, j) is ....

(b) State recurrence for entries of table in terms of smaller subproblems (and give a brief explanation in words).

(c) Write pseudocode for your algorithm to solve this problem.

(d) Analyze the running time of your algorithm.