

Homework 10

CS 331H

Due **Friday**, April 7

1. Given an undirected graph with positive edge weights, a source s , and a sink t , find the shortest path from s to t and back to s that uses each edge at most once. Aim for $O(E \log V)$ time.

Hints: Look for an “augmenting path,” inspired by Ford-Fulkerson but slightly different. And to get the desired runtime, you may need to use a potential function.

2. Do the Jupyter notebook on the website.