CS 5970/6970: Graph Algorithms
November 7, 2023

Homework 7

Question 1. Implement A* search and compare it to Dijkstras by how many nodes each touches (puts in the queue) and expands (pops off the queue). For the heuristic function, you can use euclidean or manhattan distance (as it is on a grid graph) to the terminal node. (40 points)

Question 2. Implement louvain's method for community detection and visualize the output with nodes colored by cluster. (60 points)