CS 5970/6970: Graph Algorithms

October 26, 2023

Homework 6

Question 1. Implement maximum cardinality matching (feel free to use either hopcraft-karp or edmonds-karp). (40 points)

Question 2. Implement Karger's algorithm for finding global min-cut. (40 points)

Question 3. On the two example graphs, record the size of the cut found by Karger's algorithm at each iteration (where an iteration is done when only two nodes remain). Run each 200 times and plot the distribution of cut sizes. (20 points)