

Home work for
Fundamental Algorithms
 SS 2007
 Sheet 11

Exercise 26: Consider the 2-phase algorithm `MAXUCNFLOW` when executed on a UCN G with n nodes and m edges. Let $\delta^* = \min\{\lceil 2n^{2/3} \rceil, \lceil m^{1/2} \rceil\}$. Prove that phase 1 takes time $O(\delta^*m)$.

Exercise 27:

Compute $\mathcal{H}(G)$ for the graph G to the right with algorithm `CONNECTIVITY`. You may use the computation of a minimum s, t -separator as a black box. Also, you may shorten your simulation by skipping analogous situations. At termination, prove that the result for G is correct.

