

Problem Set 6

Due: Thursday, April 1, 2021

Problem 6.1 [Analyzing Funnelsort]. Analyze Lazy Funnelsort from Lecture 9:

- (a) Prove that a K -funnel (excluding its output buffer of size K^3) occupies $O(K^2)$ space.
- (b) Prove that filling the output buffer of a K -funnel takes $O\left(\frac{K^3}{B} \log_M K + K\right)$ memory transfers, assuming $M = \Omega(B^2)$.