Homework 2, Morally Due Tue Feb 18, 2020 at 3:30PM

1. (0 points) What is your name? Write it clearly. When is the midterm tentatively scheduled (give Date and Time)? If you cannot make it in that day/time see me ASAP.

2. (100 points) For all $a \geq 3$ find a function f_a such that the following holds, and prove it.

   For every 2-coloring of $\binom{[f_a(k)]}{a}$ there exists a homogeneous set of size k.

   Your function f should be a stack of some number of 2's, roughly a of them. Your proof should be by induction on a.