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.

   \[ \text{For every 2-coloring of } (\left\lfloor f_a(k) \right\rfloor) \text{ there exists a homogeneous set of size } k. \]

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