Honors Homework 3:
Dynamic Programming

CMSC 250H

Due Date: Feb 15, 9:00AM

1. Write a program to calculate a_n if $a_0 = 1$ and

$$a_n = a_{n-1} + a_{\lfloor \frac{n}{2} \rfloor}$$

Do this by

   (a) Recursion
   (b) Dynamic Programming with a bottom up approach
   (c) Dynamic Programming with memoization

2. What does this recurrence look like? (linear, sub-linear, ect.)