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, etc.)