**Lab 1: Population Growth**

Goal:Determine how long it takes for a population to reach a particular size.

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**Background:**

Say we have a population of n llamas. Each year, n / 3 new llamas are born, and n / 4 llamas pass away.

For example, if we were to start with n = 1200 llamas, then in the first year, 1200 / 3 = 400 new llamas would be born and 1200 / 4 = 300 llamas would pass away. At the end of that year, we would have 1200 + 400 - 300 = 1300 llamas.

To try another example, if we were to start with n = 1000 llamas, at the end of the year, we would have 1000 / 3 = 333.33 new llamas. We can’t have a decimal portion of a llama, though, so we’ll truncate the decimal to get 333 new llamas born. 1000 / 4 = 250 llamas will pass away, so we’ll end up with a total of 1000 + 333 - 250 = 1083 llamas at the end of the year.

Implementation Details:

* My program should first prompt the user for a starting population size.
  + If the user enters a number less than 9 (the minimum allowed population size), the user should be re-prompted to enter a starting population size until they enter a number that is greater than or equal to 9. (If we start with fewer than 9 llamas, the population of llamas will quickly become stagnant!)
* My program should then prompt the user for an ending population size.
  + If the user enters a number less than the starting population size, the user should be re-prompted to enter an ending population size until they enter a number that is greater than or equal to the starting population size. (After all, we want the population of llamas to grow!)
* My program should then calculate the (integer) number of years required for the population to reach at least the size of the end value.
* Finally, your program should print the number of years required for the llama population to reach that end size, as by printing to the terminal Years: n, where n is the number of years.