King John has one thousand bottles of wine in his cellars. He remembers that one of the bottles is poisoned such that anyone who drinks any amount from it will die exactly on the next day. King John has ten servants who would do whatever he asks. What is the least number of days that King John needs to find the poisoned bottle?

Previous problem winners:

Randall Moreland (First solution).
and
Josh Laube

All the information about the Problem of the Week challenge can be found at: utdallas.edu/math/undergraduate/problem-of-the-week