Suppose we had a list of n integers *sorted in ascending order*. How quickly could we check if a given integer is in the list?

Solution

Because the list is sorted, we can use binary search to find the item in $O(\lg n)$ time and $O(1)$ additional space.

Next up: In-Place Shuffle ➜ (/question/shuffle?course=fc1&section=combinatorics-probability-math)