

Hide and Seek

The key to easily solving this problem easily is to recognize the unnecessary details in the problem and reducing them.

Words of the rhyme are not important to solving the problem. Only the number of words in the rhyme is important. You can get the number of lines by manually parsing the spaces yourself or using something like [stringstream](#) .

Then you should realize that if there are more friends than the number of words in the rhyme, the friends in positions that come after the number of words can never be chosen as they will be eliminated in the first few rounds. So excess friends can be dropped immediately.

Then You can naively iterate through the eliminations to find the answer. But be careful not to use anything worse than n $O(n)$ solution. Since this is a circular iteration, you can get the eliminated friend in each iteration easily with modulus in constant time.