Given an array w of positive integers, where w[i] describes the weight of index i, write a function pickIndex which randomly picks an index in proportion to its weight.

Note:

1. 1 <= w.length <= 10000
2. 1 <= w[i] <= 10^5
3. pickIndex will be called at most 10000 times.

**Example 1:**

**Input:**

["Solution","pickIndex"]

[[[1]],[]]

**Output:** [null,0]

**Example 2:**

**Input:**

["Solution","pickIndex","pickIndex","pickIndex","pickIndex","pickIndex"]

[[[1,3]],[],[],[],[],[]]

**Output:** [null,0,1,1,1,0]

**Explanation of Input Syntax:**

The input is two lists: the subroutines called and their arguments. Solution's constructor has one argument, the array w. pickIndex has no arguments. Arguments are always wrapped with a list, even if there aren't any.