COUNT YOUR COUSINS

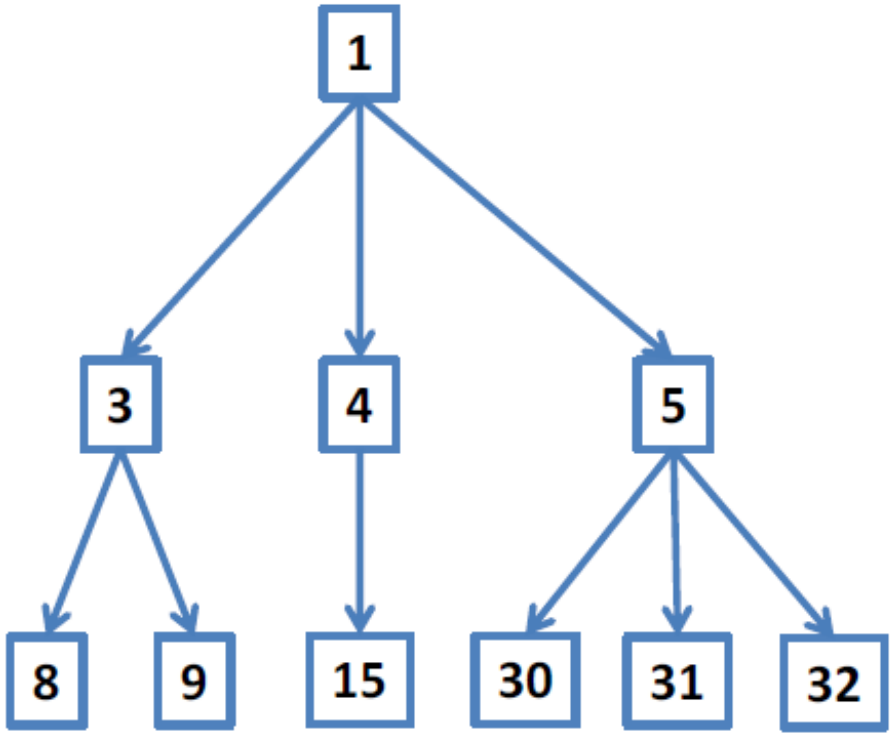
A tree is formed from a strictly increasing sequence of integers as follows:

- The first integer in the sequence is the root of the tree
- The next set of consecutive integers in the sequence describes the children of the root. The first of these will be greater than ***root***+1.
- From there, each set of consecutive integers describes the children of the lowest numbered node which does not yet have children.
- Non-consecutive integers mark a break between one set of children and the next.

For example, the sequence:

1 3 4 5 8 9 15 30 31 32

Would produce the following tree:



Two nodes are considered to be *Cousins* if they have different parents, but their parents are siblings. Given a tree and a particular node of that tree, count the number of *Cousins* of the node.

Input

There will be several test cases in the input. Each test case will begin with a line with two integers, ***n*** (1≤***n***≤1,000) and ***k*** (1≤***k***≤1,000,000), where ***n*** is the number of nodes in the tree, and ***k*** is the particular node of interest. On the following line will be ***n*** integers, all in the range from 1 to 1,000,000, and guaranteed to be strictly increasing. These describe the tree, in the manner described above. The integers will be separated with a single space. There will be no extra spaces. The value ***k*** is guaranteed to be one of the integers on the second line. Input will end with a line with two **0**s.

Output

For each test case, output a single integer, indicating the number of cousins of node ***k***. Output no spaces, and do not separate answers with blank lines.

Examples

№	stdin	stdout
1	10 15 1 3 4 5 8 9 15 30 31 32 12 9 3 5 6 8 9 10 13 15 16 22 23 25 10 4 1 3 4 5 8 9 15 30 31 32 0 0	5 1 0