Linear Search

Description   In this assignment you are requested to implement linear search algorithm for finding an item in an array:

Require: a: array of elements, of type T
Require: a_s: element to find, of type T

1: $N \leftarrow length(a)$
2: **for** $i \leftarrow 1$ to N **do**
3:    **if** $a_i = a_s$ **then**
4:        **return** i
5:    **end if**
6: **end for**
7: **return** -1

Input structure   The sequences and the element to search are integers (i.e. you can safely store them into `int` variables). Each case starts with a number which is the number of integers in the sequence. The following number is the element to search. Then the elements of the sequence follow, one per line.

Output structure   Algorithm must return -1 if a_s is not in the sequence, or its position (i.e. array index) if it is contained. You can assume that all the numbers in the sequence are distinct.