Programming Assignment-1: Computing Paradox

Due on 2020-03-12, 23:59 IST
You are provided with a playlist containing $N$ songs, each has a unique positive integer length. Assume you like all the songs from this playlist, but there is a song, which you like more than others.

It is named "Computing Paradox".

You decided to sort this playlist in increasing order of songs length. For example, if the lengths of the songs in the playlist were \{1, 3, 5, 2, 4\} after sorting it becomes \{1, 2, 3, 4, 5\}.

Before the sorting, "Computing Paradox" was on the $k^{th}$ position (1-indexing is assumed for the playlist) in the playlist.

Your task is to find the position of "Computing Paradox" in the sorted playlist.

**Input Format:**

The first line contains two numbers $N$ denoting the number of songs in the playlist.
The second line contains $N$ space separated integers $A_1, A_2, A_3...A_N$ denoting the lengths of songs.
The third line contains an integer $k$, denoting the position of "Computing Paradox" in the initial playlist.

**Output Format:**

Output a single line containing the position of "Computing Paradox" in the sorted playlist.

**Example:**

**Input:**

```
4
1 3 4 2
2
```

**Output:**

```
3
```

**Explanation:**

$N$ equals to 4, $k$ equals to 2, $A$ equals to \{1, 3, 4, 2\}. The answer is 3 because \{1, 3, 4, 2\} $\rightarrow$ \{1, 2, 3, 4\}.

**Sample Test Cases**

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
</table>
| **Test Case 1**
| 16
| 11 22 33 21 47 37 23 14 32 2 3 1 6 45 24 16 |
| 1 |
| **Test Case 2**
| 6
| 1 2 3 4 5 7 |
| 6 |
The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.
Sample solutions (Provided by instructor)

```python
n=int(input())
a=[int(x) for x in input().split()]
k=int(input())
key=a[k-1]
a.sort()
for i in range(len(a)):
    if key==a[i]:
        print(i+1)
        break
```
