Minimum number of jumps 🔖

Medium   Accuracy: 32.96%   Submissions: 100k+   Points: 4

Given an array of **N** integers **arr[]** where each element represents the max number of steps that can be made forward from that element. Find the minimum number of jumps to reach the end of the array (starting from the first element). If an element is **0**, then you cannot move through that element.
Note: Return -1 if you can't reach the end of the array.

Example 1:

```
Input:
N = 11
arr[] = {1, 3, 5, 8, 9, 2, 6, 7, 6, 8, 9}
Output: 3
Explanation:
First jump from 1st element to 2nd
element with value 3. Now, from here
we jump to 5th element with value 9,
and from here we will jump to last.
```

Example 2:

```
Input :
N = 6
arr = {1, 4, 3, 2, 6, 7}
Output: 2
Explanation:
First we jump from the 1st to 2nd element
and then jump to the last element.
```

Your task:

You don't need to read input or print anything. Your task is to complete function **minJumps()** which takes the array **arr** and it's size **N** as input parameters and returns the minimum number of jumps. If not possible returns -1.

Expected Time Complexity: $O(N)$
Expected Space Complexity: $O(1)$

Constraints:
$1 \leq N \leq 10^7$
$0 \leq arr_i \leq 10^7$

Company Tags

○ Adobe ○ Amazon ○ Housing.com ○ Moonfrog Labs ○ Walmart ○ Microsoft ○ Google

Topic Tags

○ Dynamic Programming

Related Courses

○ TCS NQT Mock Test Series ○ Microsoft SDE Test Series

Related Interview Experiences

○ Adobe interview experience set 36 off campus drive

○ Walmart lab interview experience set 9 off campus

○ Moonfrog labs interview experience set 4