Approach 4:

We're now going to look very briefly at a neat trick we can do to remove this and reduce the time complexity down to O(NlogN)O(N \log N)O(NlogN).

```
heights, bricks, and ladders are as specified in the problem

sorted_climbs = a new list
for each i between 0 and heights.length - 2 (inclusive):
    difference = heights[i + 1] - heights[i]
    if difference is positive:
        add pair(difference, i + 1) to sorted_climbs
min-sort sorted_climbs using the first value (climb distances) of each pair
```

```
heights, bricks, and ladders are as specified in the problem
sorted_climbs is the list we defined just above

define function isReachable(building_index):
    bricks_remaining = bricks
    ladders_remaining = ladders
    for each value in sorted_climbs:
        climb, index = split value into its two parts
        if index is greater than building_index:
            continue to the next iteration
        if bricks_remaining is at least climb:
            subtract climb from bricks_remaining
        else if ladders_remaining greater than 0:
            subtract 1 from ladders_available
        else:
            return false
     return true
```

Summary of algorithm:

1. store all the heights and it's indexes to check while we don't consider those building which are out-of-our range, other than that normal greedy approach.

Fifth approach:

1. There were no `ladders` remaining, and there were not enough bricks for the next climb.
2. The number of `bricks` remaining at the end was *less than* the length of the shortest climb to use a ladder.
3. The longest climb to use bricks was shorter than, or equal to, the shortest climb to use a ladder.

⑧ let's find a threshold that denotes maximum jumps will be made by bricks and we want to maximize it, because it always try to use ladders to make highest jump.

⑥ Let's convert the problem by considering their height differences.

ladders = 3

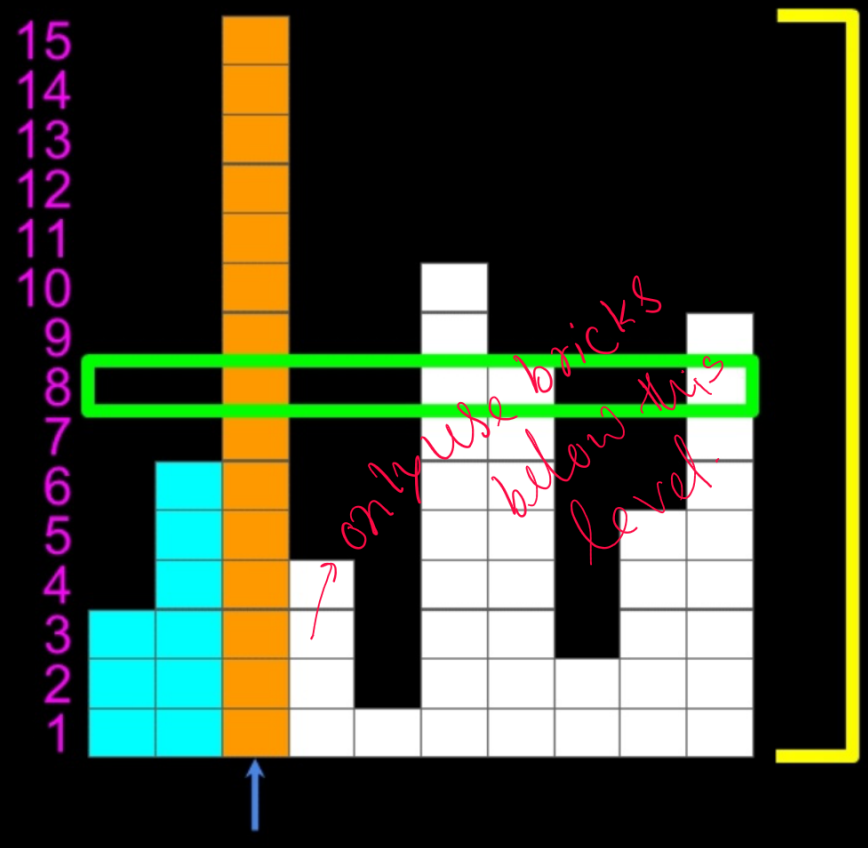
bricks = 0

lo = 0

hi = 15

mid = 8

i = 3



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If using these levels we can see we have more ladders, then we will lower the level Otherwise higher the level.

But there is a case when height is exactly equal threshold then we will use ladder or brick. first use ladder

if not Possible use brick instead.