We are given n which is the last Client from array

or [1 to n]

find first bad one that causes everything else to be bad

given isBadVersion API → returns true if bad

returns false if good

Example n = 5

[1, 2, 3, 4, 5]

isBadVersion(5) → True

isBadVersion(4) → True

isBadVersion(3) → False

→ return 4

[1]

isBadVersion → True

return 1

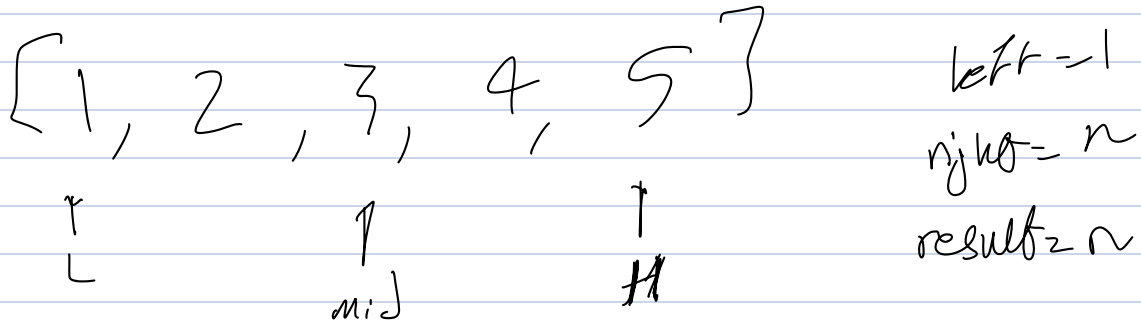
```
while n > 0:
    if isBadVersion:
        n = n - 1
    else
        return n+1
```

O(1) space

O(n) time

return 1

Binary Search Solution




```
while left <= right:
    mid = left + right // 2
    if isBadVersion(mid):
        result = mid
        right = mid - 1
    else
        left = mid + 1
return Result
```

→ O(log n) → time

O(1) → space