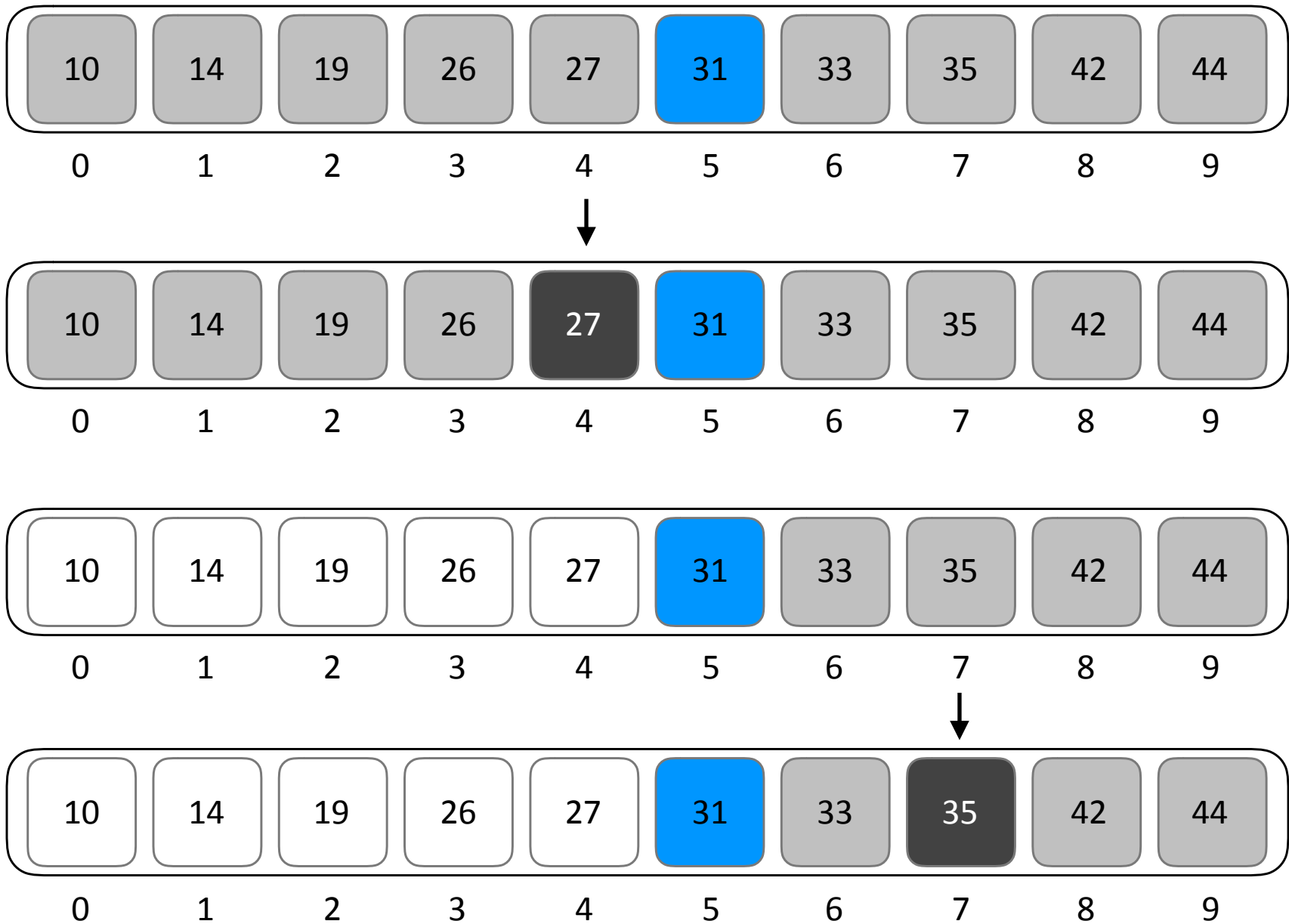


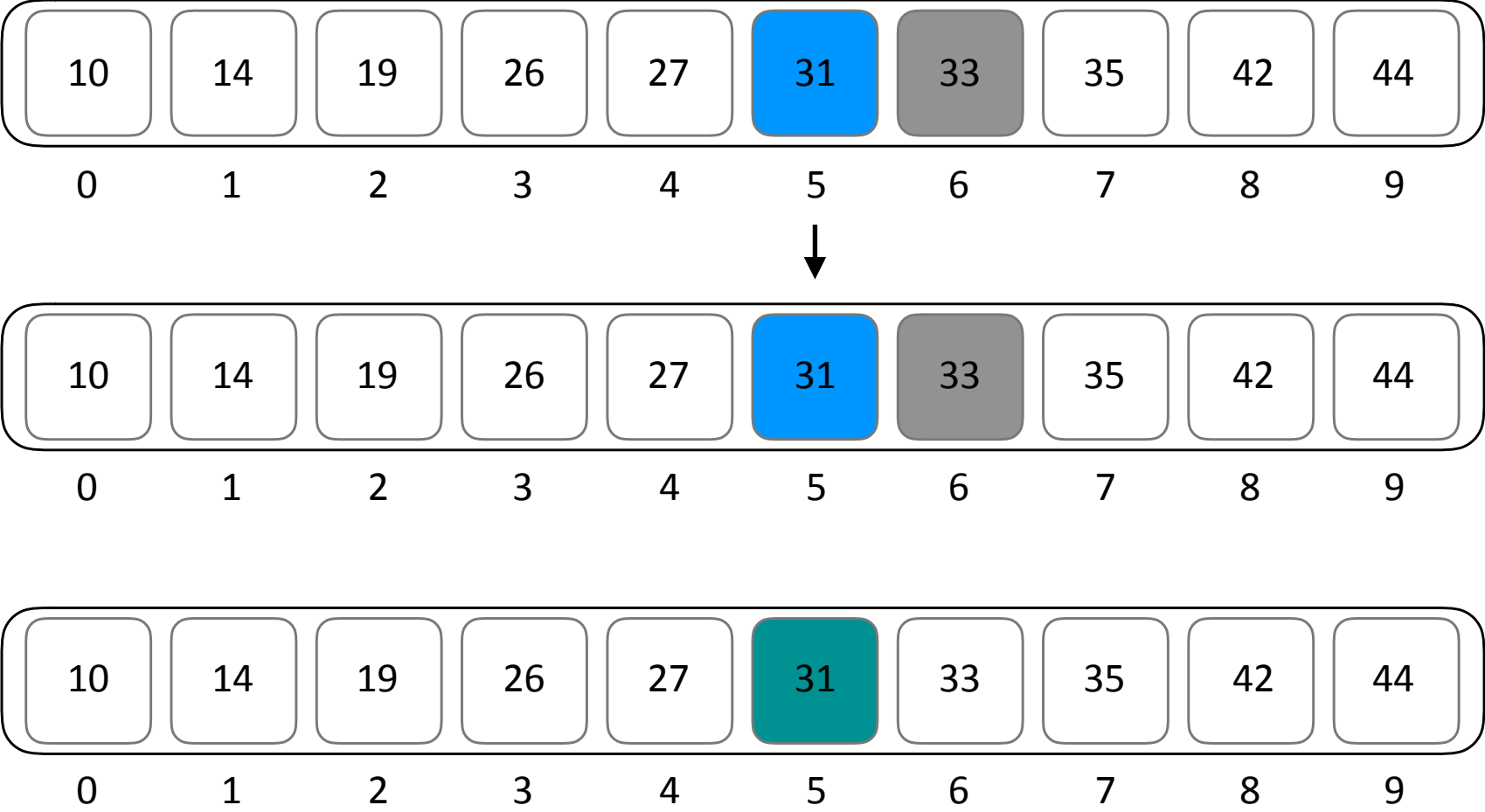
二分查找 (Binary Search)

本节内容

1. Sorted（单调递增或者递减）
2. Bounded（存在上下界）
3. Accessible by index（能够通过索引访问）

```
left, right = 0, len(array) - 1
while left <= right:
    mid = (left + right) / 2
    if array[mid] == target:
        // find the target!!
        break or return result
    elif array[mid] < target:
        left = mid + 1
    else:
        right = mid - 1
```





```
left, right = 0, len(array) - 1
while left <= right:
    mid = left + (right - left)/2
    if array[mid] == target:
        # find the target!!
        break or return result
    elif array[mid] < target:
        left = mid + 1
    else:
        right = mid - 1
```

实战题目

1. <https://leetcode.com/problems/sqrtx/>

2. <https://leetcode.com/problems/valid-perfect-square/>

<https://www.beyond3d.com/content/articles/8/> （扩展阅读）