

Last-index-recursion

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0.1 Problem statement

Given an array `arr` and a target element `target`, find the last index of occurrence of `target` in `arr` using recursion. If `target` is not present in `arr`, return -1.

For example:

1. For `arr = [1, 2, 5, 5, 1, 2, 5, 4]` and `target = 5`, `output = 6`
2. For `arr = [1, 2, 5, 5, 1, 2, 5, 4]` and `target = 7`, `output = -1`

```
In [2]: def last_index(arr, target):  
        """  
        :param: arr - input array  
        :param: target - integer element  
        return: int - last index of target in arr  
        TODO: complete this method to find the last index of target in arr  
        """  
        pass
```

Show Solution

```
In [1]: def test_function(test_case):  
        arr = test_case[0]  
        target = test_case[1]  
        solution = test_case[2]  
        output = last_index(arr, target)  
        if output == solution:  
            print("Pass")  
        else:  
            print("FAIL: Expected", solution, ", but you've got:", output)
```

```
In [6]: arr = [1, 2, 5, 5, 4]  
        target = 5  
        solution = 3  
  
        test_case = [arr, target, solution]  
        test_function(test_case)
```

Pass

```
In [7]: arr = [1, 2, 5, 5, 4]
        target = 7
        solution = -1

        test_case = [arr, target, solution]
        test_function(test_case)
```

Pass

```
In [9]: arr = [91, 19, 3, 8, 9]
        target = 91
        solution = 0

        test_case = [arr, target, solution]
        test_function(test_case)
```

Pass

```
In [10]: arr = [1, 1, 1, 1, 1, 1]
          target = 1
          solution = 5

          test_case = [arr, target, solution]
          test_function(test_case)
```

Pass