

```
const fn = (nums) => {
```

```
  const i = firstDecrease(nums);
```

```
  if (i < 0) nums.reverse();
```

```
  const j = exchangeIndex(nums, i);
```

```
  [nums[i], nums[j]] = [nums[j], nums[i]];
```

```
  reverse(nums, i+1);
```

```
}
```

```
function firstDecrease(nums) {
```

```
  for( let i = nums.length-2; i >= 0; i--) {
```

```
    if (nums[i] < nums[i+1]) {
```

```
      return i;
```

```
    }
```

```
  }
```

```
  return -1;
```

```
}
```

```
function exchangeIndex(nums, index) {
```

```
  for( let i = nums.length-1; i >= 0; i--) {
```

```
    if (nums[i] < nums[index]) {
```

$\bar{i}$   $\bar{j}$   
3 2 5 4 |

3 4 1 2 5

$\bar{i}$   $\bar{j}$   
1 2 3 4 5

5 4 3 2 1

$\bar{i}$   $\bar{j}$   
3 2 5 4 |

3 1 2 4 5

$\bar{i}$   $\bar{j}$   
1 2 3 4 5

5 4 3 2 1

```

        return i;
    }
}
return nums.length - 1;
}

```

$i$        $j$   
 1 2 3 4 5 6 7  
 3 2 5 4 1

```

function reverse (nums, index) {
    let left = index;
    let right = nums.length - 1;
    while (left < right) {
        [nums[left], nums[right]]
            = [nums[right], nums[left]];
        left += 1;
        right -= 1;
    }
}

```

3. 1. 2. 4. 5

3 1 2 5 4

3 1 4 2 5

3 1 4 5 2

3 1 5 2 4 i 0 1 2 3 4 ① exchange. 1. 4.

3 1 5 4 2 3 1 5 4 2 ② reverse 2. 4.

3 2 1 4 5

i

3 2 5 4 1

3 4 1 2 5

1 2 3 4 5 ↓