Leader in an Array

Published by BijogFc24 in JavaScript ▼

arrays

language_fundamentals

loops

Create a function that finds each number in the given array that is greater than every number that comes after it. Your solution should return an array of the number(s) that meet these criteria.

Examples

```
leader([2, 3, 20, 15, 8, 3]) \rightarrow [20, 15, 8, 3]

// Note that 20 is greater than all the elements to it's

// right side, similarly 15 and so on.

leader([2, 3, 20, 15, 8, 25, 3]) \rightarrow [25, 3]

// Note that 20 cannot be added because it is not greater than 25.

leader([1, 2, 3, 4, 5]) \rightarrow [5]

// 5 is technically greater than the (zero) remaining items.

leader([8, 7, 1, 2, 10, 3, 5]) \rightarrow [10, 5]

// 10 is greater than all items to the right of it, so include.

// 3 is not greater than all items to the right of it, so exclude.

// 5 is greater than the remaining items, so include.
```

Code

```
JS leader.js > ...
      const leader = (arr) => {
          const leaders = [];
          const ct = arr.length;
          let max;
          let first;
          for (let i = 0; i < ct; i++) {
            max = Math.max(...arr);
            first = arr[0];
            if (arr[0] === max) leaders.push(arr[0]);
            arr.shift();
          return leaders;
        };
        console.log(leader([2, 3, 20, 15, 8, 3]), [20, 15, 8, 3]);
        console.log(leader([2, 3, 20, 15, 26, 3]), [26, 3]);
        console.log(leader([1, 2, 3, 4, 3, 10]), [10]);
        console.log(leader([8, 7, 1, 2, 10, 3, 5]), [10, 5]);
```

```
PS C:\js\edabit\e> node leader.js

[ 20, 15, 8, 3 ] [ 20, 15, 8, 3 ]

[ 26, 3 ] [ 26, 3 ]

[ 10 ] [ 10 ]

[ 10, 5 ] [ 10, 5 ]

PS C:\js\edabit\e>
```