

5497. Find Latest Group of Size M

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Given an array `arr` that represents a permutation of numbers from 1 to `n`. You have a binary string of size `n` that initially has all its bits set to zero.

At each step `i` (assuming both the binary string and `arr` are 1-indexed) from 1 to `n`, the bit at position `arr[i]` is set to 1. You are given an integer `m` and you need to find the latest step at which there exists a group of ones of length `m`. A group of ones is a contiguous substring of 1s such that it cannot be extended in either direction.

Return the latest step at which there exists a group of ones of length **exactly** `m`. If no such group exists, return `-1`.

User Accepted:	0
User Tried:	0
Total Accepted:	0
Total Submissions:	0
Difficulty:	Medium

Example 1:

Input: `arr = [3,5,1,2,4]`, `m = 1`

Output: 4

Explanation:

Step 1: "00100", groups: ["1"]

Step 2: "00101", groups: ["1", "1"]

Step 3: "10101", groups: ["1", "1", "1"]

Step 4: "11101", groups: ["111", "1"]

Step 5: "11111", groups: ["1111"]

The latest step at which there exists a group of size 1 is step 4.

Example 2:

Input: `arr = [3,1,5,4,2]`, `m = 2`

Output: -1

Explanation:

Step 1: "00100", groups: ["1"]

Step 2: "10100", groups: ["1", "1"]

Step 3: "10101", groups: ["1", "1", "1"]

Step 4: "10111", groups: ["1", "111"]

Step 5: "11111", groups: ["1111"]

No group of size 2 exists during any step.

Example 3:

Input: `arr = [1]`, `m = 1`

Output: 1

Example 4:**Input:** arr = [2,1], m = 2**Output:** 2**Constraints:**

- $n == \text{arr.length}$
- $1 \leq n \leq 10^5$
- $1 \leq \text{arr}[i] \leq n$
- All integers in arr are **distinct**.
- $1 \leq m \leq \text{arr.length}$

JavaScript



```
1 ▾ /**
2   * @param {number[]} arr
3   * @param {number} m
4   * @return {number}
5   */
6 ▾ var findLatestStep = function(arr, m) {
7
8   };
```

☐ Custom Testcase

Use Example Testcases

Run

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