

# 1826. Faulty Sensor

## Description

An experiment is being conducted in a lab. To ensure accuracy, there are **two** sensors collecting data simultaneously. You are given two arrays `sensor1` and `sensor2`, where `sensor1[i]` and `sensor2[i]` are the `ith` data points collected by the two sensors.

However, this type of sensor has a chance of being defective, which causes **exactly one** data point to be dropped. After the data is dropped, all the data points to the **right** of the dropped data are **shifted** one place to the left, and the last data point is replaced with some **random value**. It is guaranteed that this random value will **not** be equal to the dropped value.

- For example, if the correct data is `[1,2, 3 ,4,5]` and `3` is dropped, the sensor could return `[1,2,4,5, 7 ]` (the last position can be **any** value, not just `7`).

We know that there is a defect in **at most one** of the sensors. Return *the sensor number ( `1` or `2` ) with the defect. If there is **no defect** in either sensor or if it is **impossible** to determine the defective sensor, return `-1`.*

### Example 1:

**Input:** `sensor1 = [2,3,4,5]`, `sensor2 = [2,1,3,4]`  
**Output:** `1`  
**Explanation:** Sensor 2 has the correct values.  
The second data point from sensor 2 is dropped, and the last value of sensor 1 is replaced by a 5.

### Example 2:

**Input:** `sensor1 = [2,2,2,2,2]`, `sensor2 = [2,2,2,2,5]`  
**Output:** `-1`  
**Explanation:** It is impossible to determine which sensor has a defect.  
Dropping the last value for either sensor could produce the output for the other sensor.

### Example 3:

**Input:** `sensor1 = [2,3,2,2,3,2]`, `sensor2 = [2,3,2,3,2,7]`  
**Output:** `2`  
**Explanation:** Sensor 1 has the correct values.  
The fourth data point from sensor 1 is dropped, and the last value of sensor 1 is replaced by a 7.

### Constraints:

- `sensor1.length == sensor2.length`
- `1 <= sensor1.length <= 100`
- `1 <= sensor1[i], sensor2[i] <= 100`

