



STUDENT REPORT

DETAILS

Name

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Roll Number

3BR23CD002

EXPERIMENT

Title

ELECTIONS

Description

You are the head of the election committee in your village. Each Political party is associated with a unique number and the votes are represented as an integer array A, where each element contains the party number voted for by the villagers. For a party to win, they must have a majority of votes. our task is to find and return an integer value denoting the winning party's number. Return -1 if there is no party with a majority.

Note: If only one vote is there he is the winner.

Input Format :

input1: An integer value representing the number the number of voters

input2: An integer array A representing the votes of the voters.

output Format:

Return an integer value denoting the winning party's number. Return -1 there is no party with a majority

Example 1:

Input:

6

1 1 2 2 2 3

Output:

2

Explanation:

As 2 got the most number of votes i.e 3.

Example 2:

Input:

6

1 2 1 1 2 2

Output:

-1

Explanation:

As both the contestants got same votes there is no majority.

Source Code:

```
n = int(input())
arr = list(map(int, input().split()))
d = {}

if n == 1:
    print(arr[0])
else:
    for i in arr:
        if i not in d:
            d[i] = 1
        else:
            d[i] += 1

    # Sort the dictionary items by their frequency in descending order
    x = sorted(d.items(), key=lambda x: x[1], reverse=True)

    # Check if the highest frequency element is unique
    if len(x) > 1 and x[0][1] == x[1][1]:
        print(-1)
    else:
        print(x[0][0])
```

RESULT

6 / 6 Test Cases Passed | 100 %