



# STUDENT REPORT

## DETAILS

Name

SAMALA JAHNAVI

Roll Number

23D21A05H4

## 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:

```
def find_winning_party(N,A):  
    if N==1 :  
        return A[0]  
    vote_count={}  
    for vote in A:  
        if vote in vote_count :  
            vote_count[vote]+=1  
        else :  
            vote_count[vote]=1  
    max_votes = max(vote_count.values())  
    max_parties = [party for party,count in vote_count.items() if count == max_votes]  
    if len(max_parties) == 1 :  
        return max_parties[0]  
    else:  
        return -1  
N = int(input())  
A = list(map(int,input().split()))  
print(find_winning_party(N,A))
```

## RESULT

6 / 6 Test Cases Passed | 100 %

