



STUDENT REPORT

DETAILS

Name

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Roll Number

KUB23ECE020

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(voter_count, votes):  
    if voter_count == 0:  
        return -1  
  
    vote_count = {}  
  
    for vote in votes:  
        if vote in vote_count:  
            vote_count[vote] += 1  
        else:  
            vote_count[vote] = 1  
  
    majority_count = voter_count // 2  
    winning_party = -1  
    max_votes = 0  
  
    for party, count in vote_count.items():  
        if count > max_votes:  
            max_votes = count  
            winning_party = party  
  
    if max_votes > majority_count:  
        return winning_party  
    else:  
        return -1  
  
input1 = 6  
input2 = [1, 1, 2, 2, 2, 3]  
output = find_winning_party(input1, input2)  
print(output)  
  
input3 = [1, 2, 1, 1, 2, 2]  
output2 = find_winning_party(input1, input3)  
print(output2)
```

RESULT

0 / 6 Test Cases Passed | 0 %