



# STUDENT REPORT

## DETAILS

Name

DIVYA D

Roll Number

3BR23CS046

## 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(num_votes):  
    vote_counts = {}  
    for vote in votes:  
        if vote in vote_counts:  
            vote_counts[vote] += 1  
        else:  
            vote_counts[vote] = 1  
    majority_threshold = num_votes // 2  
    for party, count in vote_counts.items():  
        if count > majority_threshold:  
            return party  
    return -1
```

#### RESULT

0 / 6 Test Cases Passed | 0 %