Find the majority element (with frequency > N/2)

#include<iostream>

using namespace std;

int main()

{

int a[10],n,b[10],max,flag = 0;

cout<<"Enter the number of elements: ";

cin>>n;

cout<<"Enter the array elements: ";

for(int i=0;i<n;i++)

cin>>a[i];

max = a[0];

for(int i=1;i<n;i++)

{

if(a[i]>max)

max = a[i];

}

for(int i=0;i<=max;i++)

{

b[i] = 0;

}

for(int i=0;i<n;i++)

{

b[a[i]]++;

}

for(int i=0;i<=max;i++)

{

if(b[i]>n/2)

{

cout<<"The majority element in the array is: "<<i;

flag = 1;

break;

}

}

if(flag == 0)

cout<<"No majority element is found";

return 0;

}