


```

        voter = i
        votes = 1
    else:
        voter = i
        votes +=1
    return voter

def checkMajorityElement(arr,ele):
    count = 0
    for i in arr:
        if i == ele:
            count+=1
    if count > (len(arr)//2):
        return True

def findMajorityelement(arr):
    potential_candidate = getMajorityElement(arr)
    if potential_candidate:
        if checkMajorityElement(arr,potential_candidate):
            print("found {}".format(potential_candidate))
        else:
            print("Not found")
    else:
        print("Not found")

```

```

In [20]: arr = [1,1,1,1,2,3,4]
         findMajorityelement(arr)
         # ans found 1

```

found 1

```

In [21]: arr = [1,2,3,4,4,4,4]
         findMajorityelement(arr)
         # ans found 4

```

found 4

```

In [22]: arr = [4,5,8,8,8,8]
         findMajorityelement(arr)
         # ans found 8

```

found 8

```

In [23]: arr = [3,4,5,8,8,8]
         findMajorityelement(arr)
         # ans Not found

```

Not found

```

In [24]: arr = [1,2,2]
         findMajorityelement(arr)
         # ans found 2

```

found 2

Another simple way of same logic

```

In [25]: # int getMajorityElement(int arr[], int size)
         # {
         # int majorityIndex=0, count=1;
         # for(int index = 1; index < size; index++)
         # {
         # if(arr[majorityIndex] == arr[index])
         # count++;
         # else
         # count--;
         # if(count == 0)
         # {

```

```
# majorityIndex = index;  
# count = 1;  
# }  
# }  
# return arr[majorityIndex];  
# }
```

In []:

In []: