

Find the majority Elements in the array  
 Majority elements are the elements which occurs more than or equal to  $n/2$  times the array.  
 Where N is the size of the array

Input :  
 $n=6$   
 2 4 2 4 2 3

majority ele.  $\geq n/2$   
 size of the array

Output:  
 2

$n/2 = 6/2 = 3$   
 $\geq 3$

freq of distinct

map → key, value  
~~unique~~  
~~distinct~~

2 4 2 4 2 3

2 2 4 2 4 2 3

$n=9$

mp[2]++  
 mp[4]++  
 mp[2]++  
 mp[4]++  
 mp[2]++  
 mp[3]++

mp

| key | value |
|-----|-------|
| 2   | 3     |
| 4   | 2     |
| 3   | 1     |

if (it.second  $\geq n/2$ )  
 {  
 if (it.first == mp[2])  
 {  
 ans = it.first  
 }  
 }

$n/2 = 3$

In a database there are N students . The fields of the table are Name, age , grade , gender. Your task is to return the students Name who are greater than 20 year old and Calculate the average of grades using ascii values of female candidates.

Input :  
 3  
 AAA 21 A female  
 BBB 22 B male  
 CCC 24 C female

Output:  
 AAA BBB CCC  
 66

avg

sum of total grades  
 no. of students.

Names

grades  
 who is female

65 + 67 = 132  
 132 / 2 = 66

avg = 66