Idris is back

Idris Ali came back his home in this Ramadan after a long years ago. As he is pious and earned a lot from Saudi Arabia, now he is willing to distribute his happiness by gifting all of his villagers with various presents. As his wish, all members of a same family may gifted with same item but no two members of two adjacent families will receive the same gift.

You are given the information about all the families of his village and you are asked to determine the maximum possible number of peoples can be gifted with a single item.

Input:

The first line contains t<=100 the number of test cases, each test case starts with an integer n<=100000, the number of families of the village. The next line contains n integers, i'th integer represents the family members of i'th family. Family members of each family<=100000.

Output:

For each test case just print the desired answer described above.

Sample Input	Sample Output
2 5 1 2 3 4 6 4 2 1 1 2	10 4

Problem Setter:

 Sohel ahmed