## Given an array of **N** integers. Find the first element that occurs at least **K** number of times.

import java.util.\*;

import java.io.\*;

import java.lang.\*;

public class Basic {

public static void main (String[] args) throws IOException {

BufferedReader br = new BufferedReader(new InputStreamReader(System.in));

int t = Integer.parseInt(br.readLine().trim());

while(t-->0){

String inputLine[] = br.readLine().trim().split(" ");

int n = Integer.parseInt(inputLine[0]);

int m = Integer.parseInt(inputLine[1]);

int[] arr = new int[n];

inputLine = br.readLine().trim().split(" ");

for(int i=0; i<n; i++)arr[i] = Integer.parseInt(inputLine[i]);

Solution obj = new Solution();

System.out.println(obj.firstElementKTime(arr, n, m));

}

}

}

class Solution

{

public int firstElementKTime(int[] a, int n, int k) {

d={}

for i in a:

if i not in d:

d[i]=1

else:

d[i]+=1

if k==d[i]:

return i

return -1

}

}