Felicity Marketing

Assignment 2
Data Structures & Algorithms
Due date: xx February, 2020

Problem Statement: Felicity is coming close and our FC Darth sir have started to worry about its marketing. Being lazy, the marketing team proposed a scheme in which they choose a college that does the marketing for them.

Let there be n campuses of all colleges and m roads, each road joining 2 campuses. Campuses are represented using numbers from 1 to n. Each campus is of exactly 1 college but a college may have multiple campuses. A College can only do the marketing in campuses directly connected to one of their campuses. Darth sir asked the marketing team to choose a college such that maximum number of colleges are covered. As you know marketing team is lazy, so they have asked you to choose the college for them.
If there exist multiple such colleges, return the college whose id is minimum.

Note that if you are choosing a college, then marketing is automatically done in that college.
There must exist atleast one campus of the college you output

Input
First line contains two numbers n,m - Number of campuses and number of roads
Second line contains a sequence of n integers c_1, c_2, ..., c_n, c_i being college id of ith campus
Next m lines contains two space separated integers u,v - Campuses connected by road
It is guaranteed that there are not multiple roads between two campuses and no campus is connected to itself.
Constraints
$1 \leq n \leq 10^5$
$0 \leq m \leq 10^5$
$1 \leq c_i \leq 10^5$
Output
Print a single integer - Id of chosen college with maximum marketing. If there are multiple such colleges, print the minimum id among them
Time Limit: 1 sec
Memory Limit: 256 MB

Sample Test Case

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

Explanation
Trying out all colleges and marketing done by them
1 :- 3 (three colleges 2,3,4)
2 :- 2 (two colleges 1,3)
3 :- 2 (two colleges 1,2)
4 :- 1 (one colleges 1)
College with maximum marketing (3) is 1.