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Welcome to GDB Online.

GDB online is an online compiler and debugger tool for C, C++, Python, Java, PHP, Ruby, Perl,

C#, VB, Swift, Pascal, Fortran, Haskell, Objective-C, Assembly, HTML, CSS, JS, SQLite, Prolog.

Code, Compile, Run and Debug online from anywhere in world.

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import java.io.BufferedReader;

import java.io.IOException;

import java.io.InputStreamReader;

import java.util.Arrays;

import java.util.StringTokenizer;

class Main {

public static boolean [][] mat;

public static int [] color;

public static boolean fillColor (int id, int toFill) {

if (color[id]==Integer.MAX\_VALUE) {

boolean flag=true;

color[id]=toFill;

for (int i=0;i<mat.length && flag;i++) {

if (mat[id][i]) {

flag=fillColor(i,1-toFill);

}

}

return flag;

} else if (color[id]!=toFill) {

return false;

}

return true;

}

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

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

while (true) {

int n=Integer.parseInt(br.readLine());

if (n==0) {

break;

}

int l=Integer.parseInt(br.readLine());

mat=new boolean [n][n];

color=new int [n];

Arrays.fill(color, Integer.MAX\_VALUE);

for (int i=0;i<l;i++) {

StringTokenizer st=new StringTokenizer(br.readLine());

int src=Integer.parseInt(st.nextToken());

int dest=Integer.parseInt(st.nextToken());

if (src!=dest) {

mat[src][dest]=true;

mat[dest][src]=true;

}

}

if (fillColor(0,0)) {

System.out.println("BICOLORABLE.");

} else {

System.out.println("NOT BICOLORABLE.");

}

}

}

}