import java.util.Arrays;

public class Main2 {

public static void main(String[] args) {

int[][] image = {

{1, 1, 1},

{1, 1, 0},

{1, 0, 1}

};

int sr = 1, sc = 1, color = 2;

Solution sol = new Solution();

int[][] result = sol.floodFill(image, sr, sc, color);

System.out.println("Flood-filled image:");

for (int[] row : result) {

System.out.println(Arrays.toString(row));

}

}

}

class Solution {

public int[][] floodFill(int[][] image, int sr, int sc, int color) {

int originalColor = image[sr][sc];

if (originalColor != color) {

fill(image, sr, sc, originalColor, color);

}

return image;

}

private void fill(int[][] image, int r, int c, int originalColor, int newColor) {

if (r < 0 || r >= image.length || c < 0 || c >= image[0].length) return;

if (image[r][c] != originalColor) return;

image[r][c] = newColor;

fill(image, r + 1, c, originalColor, newColor);

fill(image, r - 1, c, originalColor, newColor);

fill(image, r, c + 1, originalColor, newColor);

fill(image, r, c - 1, originalColor, newColor);

}

}