The Embassy ball   X64345_en

You are chief of protocol for the embassy ball. The crown prince instructs you to either invite Peru or to exclude Qatar. The queen asks you to invite either Qatar or Romania or both. The king, in spiteful mood, wants to snub Peru or Romania or both. Is there a guest list that will satisfy the whims of the entire royal family?

Design a circuit that has three inputs (*Peru*, *Qatar* and *Romania*) and an output (*acceptable*). Each input represents the fact that a country is invited (1) or not invited (0). The output indicates whether the invitations satisfy the whims of the royal family.

Specification

module *embassy_ball* (*Peru*, *Qatar*, *Romania*, *acceptable*);
    input *Peru*, *Qatar*, *Romania*;
    output *acceptable* ;

Input

- *Peru*, *Qatar* and *Romania* indicate whether these countries are invited to the embassy ball.

Output

- *acceptable* indicates whether the invitations satisfy the whims of the royal family.

Problem information

Author: Jordi Cortadella

Generation: 2026-02-03T12:14:54.046Z