New Year's Eve Party

Problem 36^e. You are organizing a New Year's Eve party. There will be n tables in the room, with m chairs around each table. You need to select a table for each of the guests, who are assigned numbers from 1 to mn, so that two conditions are satisfied. First, some guests like each other and want to sit together; accordingly, you are given a set A of two-element subsets of $\{1, ..., mn\}$, and, for every $\{i, j\}$ in A, guests i and j should be assigned the same table. Second, some guests dislike each other and want to sit at different tables; accordingly, you are given a set B of two-element subsets of $\{1, ..., mn\}$, and, for every $\{i, j\}$ in B, guests i and j should be assigned different tables. Write a CLINGO program that finds such a seating arrangement or determines that it is impossible.