homework11.2 Dining

Description

Several families go out to dinner together.

There are n families and the i-th family has a_i members. Also there are mm tables available and the i-th table has a seating capacity of b_i.

To increase their social interaction, they would like to sit at tables so that everyone has a seat and no two members of the same family are at the same table. Please check if there is a seating arrangement that meets the objective.

Input Format

The first line contains an integer $T(1 \leq T \leq 100)$, which indicates the number of test cases.

Each test case contains three lines:

The first line contains two integers n, m $(2 \leq n, m \leq 30)$ - the number of families and the number of tables.

The second line contains n integers $a_1, a_2, ..., a_n (1 \leq a_i \leq 30)$ - the number of members of each family.

The third line contains m integers $b_1, b_2, ..., b_m (1 \leq b_i \leq 30)$ - the seating capacity of each table.

Output Format

Print $T$$T$ lines, one line for each test case :

If there is a seating arrangement that meets the objective, print "Yes", otherwise, print "No".

Sample Input	Sample Output

3 2 2 3 3 2 2 2 3 3 2 1 1 2 2 4 3 3 3 2 1 2	No No Yes
3 3 3 2 1 3 3 1 1 3 4 3 4 2 2 2 2 2 3 5 3 2 2 3 2 2 3 3	No No Yes
5 6 8 1 1 3 4 4 2 1 2 2 1 2 2 2 1 6 9 3 4 4 2 2 3 1 1 1 1 1 2 2 2 1 6 10 2 2 1 2 1 2 2 2 2 2 1 2 1 1 2 1 6 11 1 1 4 2 1 1 2 1 1 2 2 2 2 2 2 1 1 6 12 3 2 1 3 4 3 2 1 1 1 1 2 1 1 2 1 1 1	No No Yes Yes No

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Hint

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