12996 Ultimate Mango Challenge

Rajshahi is one of the oldest cities in Bangladesh. Its land is mother of one of the most delicious fruits in the world, Mango. You can find mango in various parts of the world, but the mango from Rajshahi is famous worldwide for its unique and delicious taste. People are so obsessed with these mangoes that sometimes they hear "রাজশাহীর আম আছে" in japanese shop (well ... they actually say "irasshaimase" which means welcome). The variety of mangoes that grows around Rajshahi is truly overwhelming. As an outsider, it might be really surprising to see people of Rajshahi eating mangoes (or food prepared from mangoes) three times a day. I was surprised first



time to see such enthusiasm. But I was not ready to face what was coming next.

One of my relative from Rajshahi challenged me to eat mangoes like they do. When I tried to get out of it I was mocked in various ways, and was called a coward. So I decided to give it a shot. But as a CSE major, I wanted to know beforehand whether I am going to pass or fail the challenge. It will be really easy to find out using a program. But I can't use laptop keyboard and only you can help me out from this big trouble.

Input

First line contains T (T < 10), number of test cases. Each case starts with N (0 < N < 10), different types of mangoes and L ($0 \le L \le 20$), my limit of eating maximum number of mangoes at one meal. Next line contains N integers, all of them will be less than 10. Each of these integers indicates number of mangoes of each kind in the plate in front of me. Next line will contain N integers, all of them less than 10. Each of these integers indicates my limit of eating a particular type of mango. I need to finish every mango in the plate to win the challenge. Total number of mangoes I eat cannot exceed my limit L. Also number of a particular type mangoes eaten should also not exceed the limit for that particular type.

Output

For each case, output 'Case X:' where X is the case number. After that print 'Yes' or 'No' based on whether you can win the challenge or not.

Sample Input

3

3 5

1 2 3

1 3 3

3 6

1 2 3

- 1 3 2
- 3 6
- 1 2 3
- 3 3 3

Sample Output

Case 1: No Case 2: No

Case 3: Yes