Similar Dishes Problem Code: **SIMDISH**

Chef has just found a recipe book, where every dish consists of exactly four ingredients. He is going to choose some two dishes and prepare them for dinner. Of course, he likes diversity and wants to know whether the two dishes are *similar*.

Two dishes are called *similar* if at least half of their ingredients are the same. In other words, at least two of four ingredients of the first dish should also be present in the second dish. The order of ingredients doesn't matter.

Your task is to examine **T** pairs of dishes. For each pair, check if the two dishes are similar and print "similar" or "dissimilar" accordingly.

Input

The first line of the input contains an integer **T** denoting the number of test cases. The description of **T** test cases follows.

The first line of each test case contains four distinct strings, denoting ingredients needed for the first dish. Each ingredient is represented by a string of length between 2 and 10 inclusive, consisting of lowercase English letters.

The second line of each test case describes the second dish in the same format.

Output

For each test case, output a single line containing the answer — "similar" if at least half of the ingredients are same, and "dissimilar" otherwise (without the quotes).

Constraints

- 1 ≤ **T** ≤ 200
- The length of each string will be between 2 and 10 inclusive.

Example

Input:

```
5

eggs sugar flour salt

sugar eggs milk flour

aa ab ac ad

ac ad ae af

cookies sugar grass lemon
```

```
lemon meat chili wood

one two three four

one two three four

gibberish jibberish lalalalala popopopopo

jibberisz gibberisz popopopopu lalalalalu
```

Output:

```
similar

similar

dissimilar

similar

dissimilar
```

Explanation

Test case 1. The first dish consists of ingredients: eggs, sugar, flour, salt, while the second dish consists of: sugar, eggs, milk, flour. Three of four ingredients are present in both dishes (eggs, sugar, flour) so the two dishes are similar.

Test case 2. This example shows that strings in the input don't necessarily represent real food. The answer is again "similar", because two ingredients are present in both dishes ("ac" and "ad").

Test case 3. The only common ingredient is lemon, so the answer is "dissimilar". Remember that at least two ingredients should be present in both dishes.