
3. All That Jazz

Program Name: jazz.java

Input File: jazz.in

Benny is a struggling musician trying to determine if the local nightclub he works for is stealing his music. Help Benny compare samples of each melody.

Input

The first line of input will consist of a single integer, n , indicating the number of data sets in the input. The remainder of the input consists of those n data sets.

Each data set will consist of two lines with the first line containing Benny's melody and the second line containing the nightclub's melody. Each melody will be a sequence of notes, with each note represented by a single character A-G.

Melodies are considered matching if the notes in Benny's melody exist in the nightclub's melody in the same order. For example:

ABCD

would match

AGBGCGDG

since ABCD exists in the second melody (with added G notes)

but

ABCD

would not match

AGBGDGCG

since ABCD does not exist (in that order) in the second melody.

Output

For each dataset in the input, display the line, "There is no match." if the melodies do not match or "There is a match consisting of X notes.", if the melodies match, where X is the length of the shortest sequence of notes that match.

Example Input File

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ABCD

AGBGCGDG

ABCD

AGBGDGCG

CEFGCEFGCEFGCED

ABABABABABABACEFBGCAEBFGCAEFGECEBEADED

ABCD

ABCAAADABCAADABCADABCD

Example Output To Screen

There is a match consisting of 7 notes.

There is no match.

There is a match consisting of 22 notes.

There is a match consisting of 4 notes.