

Database

We want to implement a program that collects lecturer data in each course. The easiest way is collecting lecturer pairing with courses' ID, for example

2110101, Sukree

2110101, Somchai

2100111, Sukree

2110200, Nattee

2110327, Nattee

This method has a disadvantage when the lecturers change their name or courses' IDs are changed, we would have to edit data line by line. A method which many databases have been used is collecting lecturer data and course data separately and creating a pairing file which collects pairs of lecturer and course for example

Courses.txt	teachers.txt	database.txt
1, 2110101	1, Sukree	1,1
3, 2100111	9, Somchai	1,9
4, 2110200	5, Nattee	3,1
7, 2110327	2, Athasit	4,5
8, 2110499		7,5

This kind of method is more efficient when we want to edit data, However, this method needs additional work to get the original data. Your task is to process these 3 files to convert them into the original form of data.

Input

3 lines of input that are files' names: the first contains courses' ID, the second contains lecturers and the third contains pairs of courses' and lecturers.

Output

Displays data which has been processed. If there are error data, it should display record error.

Example

Input (from keyboard)	Output (on screen)
courses.txt teachers.txt database.txt	2110101,Sukree 2110101,Somchai 2100111,Sukree 2110200,Nattee 2110327,Nattee
courses.txt teachers.txt database.txt	record error 2100111,Sukree 2110200,Nattee record error

database2.txt contains these data

1,4
3,9
4,5
5,1