

Birthday

Lili works in a certain cake shop. One day her boss asked her to make a program to notify if today is one of their customer's birthday, so they can give him a special discount. But because there are so many customers, this program must only notify when the customer already bought at least M cakes before. Help her make the program.

Format Input

The first line of the input will consist of an integer T, the number of test cases. The first line of each test case consists of two integers N and M, each denoting the number of customers and minimal number of cakes already bought. The next N lines will consist of a string S, date in the DD/MM format, and an integer A, each denoting the customer name, birthday, and how many cakes they have bought. The next line will have an integer Q, denoting how many days the cake shop will open. Then the next Q lines will have a date in the DD/MM format, denoting today's date.

Format Output

For each test case, print "Case #X:" (X starts at 1). On the next line, print the name of the customer who meets the criteria. If there are more than one customers, print them on separate lines in order of their input. If there are none, print "No one".

Constraints

$1 \leq T \leq 10$

$1 \leq N \leq 1000$

$1 \leq M, A \leq 10000$

$1 \leq Q \leq 1000$

$1 \leq DD \leq 31$

$1 \leq MM \leq 12$

Customer's name will consist of lowercase english characters and its length will be no more than 100.

Sample Input	Sample Output
<pre> 2 5 5 andi 12/05 5 boby 23/03 10 charlie 01/01 2 daniel 11/11 3 ethan 30/12 3 3 12/05 11/11 23/03 2 5 andi 12/05 5 boby 12/05 10 2 12/05 13/05 </pre>	<pre> Case #1: andi No one boby Case #2: andi boby No one </pre>

Note

Yes, there will be 31 February. Lili works in a different world than the one we live in.