
Drug interactions

V39451_en

Write a program that loads a list of drug interactions, and then allows the user to query it.

The input has two parts: data and queries.

The data part consists of an integer n indicating how many drug-effect-drug triplets are to be read. Then, there are n lines, each with a drug name, an effect, and another drug name.

The drugs names and effect types are not constrained to a limited list.

After the n data lines comes the query part. Here, a line may consists of a drug name and an effect followed by a question mark, or a question mark followed by an effect and a drug name. In the former case, the program must print all the drugs that are affected by the given one with the given effect. On the latter case, the program reports the drugs that have the given effect on the given drug

Input

The input consists of a number $n \geq 0$, followed by n triplets drug-effect-drug. After that, there is a sequence of queries, each of them consisting of a question mark and effect and a drug, or a drug, and effect and a question mark.

Output

For each query the list of drugs answering the query, alphabetically sorted. If no drugs are found for the given query, the program prints "not found"

Sample input

```
20
spermidine potentiate opiate
bezafibrate inhibit antihypertensive
analgesics activate antihypertensive
tolterodine enhance enoxacin
spermidine intercept antihypertensive
bentoquatam intercept tramadol
enoxacin enhance opiate
tramadol activate opiate
bentoquatam intercept tramadol
tolterodine enhance analgesics
analgesics inhibit enoxacin
anticholinergics inhibit ketorolac
anticholinergics activate tramadol
anticholinergics intercept chloramphenicol
bezafibrate intercept bentoquatam
antihypertensive activate vasopressors
vasopressors intercept chloramphenicol
opiate affect spermidine
tramadol inhibit bentoquatam
bezafibrate affect anticholinergics

bentoquatam intercept ?
? intercept chloramphenicol
opiate affect ?
enoxacin activate ?
tolterodine enhance ?
? inhibit opiate
```

Sample output

```
Drugs that bentoquatam intercept: tramadol
Drugs that intercept chloramphenicol: anticholinergics
Drugs that opiate affect: spermidine
Drugs that enoxacin activate: NOT FOUND
Drugs that tolterodine enhance: analgesics enoxacin
Drugs that inhibit opiate: NOT FOUND
```

Problem information

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