## FREEDONIA REGULATIONS

Write a Python program to keep track of the regulations in Freedonia. The program reads the sequence of rules issued by Rufus T. Firefly and calculates the set of rules that are valid in specific days.

In more details, the file rules.dat contains the rules in the format:

```
date1: +/-rule1 ... +/-ruleI
date2: +/-rule1 ... +/-ruleJ
...
dateN: +/-rule1 ... +/-ruleK
```

Where the **date** is a string in the format dd-mm-yyyy; a **rule** is a string without spaces, for instance  $FFP2\_mask\_in\_closed\_spaces$ , the leading plus + or minus - signifies that the rule is enforced (+) or lifted (-). One or more rules might be specified in each date. Dates are in strict chronological order, but they might be non consecutive. The format of the file is correct.

A second file, dates.dat contains a list of interesting dates in the same format, these dates might not be in chronological order.

The program must report, for each of such dates, the set of active rules, one per line, in alphabetic order.

## Example

ffp2\_mask\_indoor
green\_pass\_workplace
surgical\_mask\_outdoor

## rules.dat

```
01-01-2021: +surgical_mask_outdoor +surgical_mask_indoor
05-01-2021: -surgical_mask_indoor +ffp2_mask_indoor
08-01-2021: +green_pass_workplace
01-02-2021: -ffp2_mask_indoor +surgical_mask_indoor -surgical_mask_outdoor
01-03-2021: +surgical_mask_outdoor
05-03-2021: +super_green_pass_workplace -green_pass_workplace

dates.dat
25-01-2021
01-01-1999
01-02-2022

output
25-01-2021:
```

## 01-01-1999:

01-02-2022:

super\_green\_pass\_workplace
surgical\_mask\_indoor
surgical\_mask\_outdoor