

Management of company PC loans

The technical office of a large company has a number of PCs to loan to employees in case of need (for example, when their personal PC is in for maintenance or they are waiting to purchase a new one). The list of all PCs for this purpose is contained in a text file called `parcoPC.txt`, which reports on each line the unique identifier code of a PC (an alphanumeric string of 4 characters). The PCs are not listed in a specific order.

A second text file `registrazioni.txt` reports all PC loans/returns, in chronological order. In particular, each line of the file reports the following information:

```
machineID:personID:date
```

Where `machineID` is the identifier code of the PC, `personID` is the unique employee number (a string of 6 digits) who has borrowed or returned the PC, and `date` is the loan or return date, in format `dd/mm/yyyy`. The file does not distinguish in any way between loans and returns: the same PC will appear first on the occasion of the loan to a certain employee, and possibly a second time in a subsequent line, on the occasion of the return by the same employee. Please note that the same PC can be loaned and returned multiple times, and the same person can borrow more than one PC, even simultaneously.

It is assumed that the format of the two files is correct and that the registrations are all consistent (that is: a loan corresponds surely to a subsequent return by the same employee. If this is not the case, it means that the PC is still on loan).

Write a Python program that, after reading the information contained in the two input files, prints to the monitor:

the list, sorted by increasing employee number, of employees who have borrowed PCs that they have not yet returned. For each employee, print the list of the codes of the PCs they currently have on loan, in alphabetical order. the sorted list of PCs that are currently available for loan. In case all company PCs are on loan, the program should print an appropriate message.

Example

```
A021
A100
A123
B015
B088
C055
S100
S125
Q034
Z300
Z500
```

File `registrazioni.txt`

```
Q034:100123:31/01/2021
A123:100123:01/02/2021
A100:100123:01/02/2021
B088:123456:10/05/2021
A123:100123:15/06/2021
B088:123456:20/06/2021
A123:123456:21/07/2021
Z300:135987:22/01/2022
S100:100012:20/09/2022
```

Program output (printed to the monitor)

```
List of ongoing loans:
100012: S100
100123: A100, Q034
123456: A123
135987: Z300
```

```
PCs available for loan: A021, B015, B088, C055, S125, Z500
```