It is a well-known fact that people celebrate birthdays, it is also known that some people also celebrate their pets’ birthdays. Extend the program from your last task to add **birthdates** to citizens and include a class **Pet**, pets have a **name** and a **birthdate**. Encompass repeated functionality into interfaces and implement them in your classes.

You will receive from the console an unknown number of lines. Until the command "**End**" is received, each line will contain information in one of the following formats "**Citizen <name> <age> <id> <birthdate>**" for **Citizen**, "**Robot** **<model> <id>**" for **Robot** or "**Pet <name> <birthdate**" for **Pet**. After the "**End**" command on the next line, you will receive a single number representing **a specific year**, your task is to print all birthdates (of both **Citizen** and **Pet**) in that yearin the format **day/month/year** in the **order** of **input**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Citizen Peter 22 9010101122 10/10/1990  Pet Sharo 13/11/2005  Robot MK-13 558833251  End  1990 | 10/10/1990 |
| Citizen Stam 16 0041018380 01/01/2000  Robot MK-10 12345678  Robot PP-09 00000001  Pet Topcho 24/12/2000  Pet Rex 12/06/2002  End  2000 | 01/01/2000  24/12/2000 |
| Robot VV-XYZ 11213141  Citizen Corso 35 7903210713 21/03/1979  Citizen Kane 40 7409073566 07/09/1974  End  1975 | <empty output> |