Problem 3 – Jedi Code-X

The Jedi and the Sith warfare is ruthless, and every leak of information could be lethal to the Light side's revolution, that is why encoded messages were created. You need to write a program that decodes the incoming messages and the names of those that sent them.

On the first line of input you will receive **n**, an integer. On the next **n** lines you will be receiving strings of **random ASCII characters** with **random length**, which will represent the encoded text.

After that you will receive **2** lines. They will contain **patterns**. You must **extract all names** that consist **of English alphabet letters**, with **length equal to the length of the pattern** given on the **first line**, and **prefix** the given pattern itself. Then you must extract all messages which consist of **English alphabet letters and digits**, with **length equal to the length of the pattern** given on the second line, and **prefix** the given pattern itself. A **character** which **does not** follow the **content conditions** specified above **denotes the end** of a particular Jedi name / message.

On the **last line** of input you will get **integers** separated by a space. **Every integer is an index of a message**. The **first Jedi found** in the encoded text corresponds to **the first index** and **the message at that index**, the second Jedi to the second index and so on… If a **particular message's index** is **non-existent** you **ignore** it and assign the next message with a **valid index** to the **current** Jedi, if such a message does not exist the Jedi is left with no message. In the situation that a Jedi's message has an invalid index and he skips through the messages to find a valid one, the Jedi after him (if one exists) will take the message after the one the first Jedi took. If there are **more indexes** than needed, **ignore** the extra indexes.

Input
- On the first line you will get the integer **n**.
- On the next n lines you will get random amounts of random ASCII characters.
- After that you will get the two patterns each on a new line.
- On the last line you will get integers separated by a single space.

Output
- The output is simple. You must print the Jedi, if the messages are less than the Jedi, print only those Jedi that have messages.
- Jedi must be printed in the following format:
  - {Jedi name} – {Jedi message}

Constraints
- N will be a valid integer in the range [0, 1000].
- The encoded text will consist of ASCII characters.
- The prefix patterns can consist of any ASCII character.
- The integers (indexes of messages) will be valid integers in range [0, 1000].
- Allowed time / memory: 100ms / 16MB.

Input	Output
4 1-02948091jeknm,a sd,nbjwhu3hroLKjahefkljalsj#=#=#pesho 1gjq&&&geo*nhvjsfbsbdkfjq.311/.24/3.4,l2 3u827582929@@@@#=#=#gosho &&&ped-&&&eraeesmdfjbdfspefkowekf #=#=# &&& 2 1	pesho - ped gosho - geo

Input	Output
5 asdasdasd------Petkan123asdasd sasd ------Goshko-asdasdfddfgasdada 1r23 ------Lilqna564!3876876429 *)(@*#)(&$%*^&------Stamat+as :-@-@-ONIGH u305uvwoenh N{-@-@-OAIHF ------ -@-@- 2 1 1 3	Petkan - OAIHF Goshko - ONIGH Lilqna - ONIGH