Q3. No Fishing! (25%)

Please design a program that can filter messages with banned words in a chat room, and the one who sent this message will get one warning. Once a person gets three warnings, all messages will be ignored in the chat room.
The comparison between the banned words and messages should be case-sensitive.

- **Input Format**
  The first line will contain an integer **n** and a string of the **banned word**. **n** represents the number of following messages you need to filter. The **banned word** is the word that should not appear in the chat room after filtering. In the next **n** lines, the format of input messages will be **name: message.**

- **Output Format**
  For each input except the first line, the program outputs the line directly if the **name** does not get three warnings, and the **message** does not contain the **banned word**.
  If the **name** has got three warnings, then the program print "**`name` is `banned.`**" for that line.
  Notice that you only need to filter the **banned words** in the message. If the **banned word** appear in the **name**, you don't need to filter it.

- **Technical Specifications**
  - $1 \le n \le 1000$
  - **Banned word** is a string that only contains the alphabet and number characters. The length of **banned word** will not exceed 128 characters.
  - **Name** is a string that only contains alphabet and number characters. The length of it will not exceed 20 characters.
  - **Message** consists of several strings, which are split by spaces. Each string consists of ASCII code from 32 to 126, which is basically all printable characters.
  - The length of **name: message** will not exceed 4095.

- **There are some restrictions you need to follow:**
  1. You are not allowed to include `<string.h>` or other libraries with functions about string process.

Input Example	Output Example
11 easy	Tozy: Weeeeeeee!!!!!!
Tozy: Weeeeeeee!!!!!!	NaNin: Hi, guys <3
Ruwan: I'm UC genius. So	NaNin: I'm 159cm!
easy.	8tan: Easy.
NaNin: Hi, guys <3	Ruwan: You should play

NaNin: I'm 159cm!
8tan: Easy.
Ruwan: Yeah, eeeeeasy.
Ruwan: You should play other games.
Ruwan: This game is too easy.
Ruwan: Why don't you change games?
Ruwan: Hello?
HaHa: ea_sy lolllll
other games.
Ruwan is banned.
HaHa: ea_sy lolllll