This is a ***psychotherapist*** program that continuously reads a text from the user and then gives a response based on some rules and keywords in the text until the user enters "I have to go now.".

This problem falls under the domain of *Artificial Intelligence*. The program simulates the behavior of a psychotherapist. The **user (patient)** starts the conversation by writing a text. Then the **computer (psychotherapist)** asks a question related to the text.

The program interacts with user in simple English language and simulates a conversation as a type of chatbot.

The program ignores **14 punctuation marks**, which are stored in the array `punctuations`, such as points, comma, semi comma, single and double quotation marks, question marks, exclamation points, dash and brackets.

```
char[] punctuations = {'.', ',', ';', ''','"', '?', '!', '-', '{', '}', '(', ')', '[', ']'}
```

The program works well, when the user uses uppercase or lower case letters, or mixes them up.

The program applies the *rules* in the following order.

**Rules:**

**Rule 1-** If a word *X* (except stop words) appears more than 2 times in the text, the computer asks "`Do you love X?`"

Assume that **stop words** are stored in the following array:

```
string[] stop_words = {"a", "after", "again, "all", "am", "and", "any", "are", "as", "at", "be", "been", "before",
"between", "both", "but", "by", "can", "could", "for", "from", "had", "has", "he", "her", "here", "him", "in", "into",
"I", "is", "it", "me", "my", "of", "on", "our", "she", "so", "such", "than", "that", "the", "then", "they", "this", "to",
"until", "we", "was", "were", "with", "you"}
```

If more than one word appears more than 2 times, select any of them.

**Rule 2-** If the user asks a **question** to the computer with one of the following keywords: `Why, Who, When, Where, What` and `How`, the computer replies by randomly selecting one of the following questions:

```
"Do you often think about this question?"
"Why do you want to know?"
```

**Rule 3-** If the user uses one of the **negative words** (*X*), which are stored in the array *negative_words*, the computer asks "`Being X is bad for your health. How long do you feel X? Why do you feel X?`"

Assume that **negative words** are stored in the following array:

```
string[] negative_words = {"stress", "depression", "sad", "angry", "hate", "pain", "abnormal", "abort", abuse",
"brittle", "hurt", "scared", "afraid", "upset", "confused", "lonely", "tired", "vulnerable", "guilty", "anxiety",
"disappointment", "regret", "awful", "sick", "regretful", "unhappy", "sorrowful", "troubled", "worried", "annoyed"}
```

**Rule 4-** The program converts pronouns: **I** with **you**, **my** with **your**, **myself** with **yourself, am** with **are, me** with **you**.
The program also removes "**Yes**" words if it exists and inserts whether "**, right?**" word or "**You say**" words randomly.
If the user enters more than one sentences, the program converts the last sentence only.

**Sample Dialogue:**

```
User    : "Hello. I am Cenk."
Program : "Hello. You are Cenk, right?"
User    : "Yes. I am feeling unhappy. I think I need a doctor."
Program : "Being unhappy is bad for your health. How long do you feel unhappy? Why do you feel
          unhappy?"
User    : "I feel unhappy for a long time. I have some nightmares."
Program : "You say you have some nightmares?"
User    : "Yes. My nightmares are usually about my mother."
Program : "Your nightmares are usually about your mother, right?"
User    : "Yes. My mother always says that you should believe in your grand mother, but my mother
          doesn't believe in her mother herself."
Program : "Do you love mother?"
User    : "Yes. But, why my mother doesn't understand me?"
Program : "Do you often think about this question?"
User    : "Yes. She gets on my nerves sometimes."
Program : "She gets on your nerves sometimes, right?"
User    : "Yes. Sometimes I can’t control myself!"
Program : "You say sometimes you can’t control yourself?"
User    : "I have to go now."
```