**Search For Names**

You work for an application company, and they are currently making an application where you can message friends. They are trying to implement the search feature in their application and need your help in programming it. These are the following operations:

* “add [name]”: name being a string that contains the first name of a friend you would like to add. You must store this name as a contact in the application.
* “find [prompt]”: prompt being the beginning of the searched-up names. It will return the number of names that begin with the given prompt.

**Input:** The first line of input contains **Q**, the number of queries that will be done. The next **Q** lines contain two space-separated strings. The first word will contain either “add” followed by a name, or “find” followed by a searched-up prompt. **Note:** Each name will be distinct.

**Output:** For each “find” query, you will first output “find [prompt]: ”. You will then output the number of matches for the searched-up prompt.

**Example Input:**

7

add ed

add eddie

add edward

find ed

add edwina

find edw

find a

**Example Output:**

find ed: 3

find edw: 2

find a: 0

**Explanation:** For “find ed”, we see that “ed”, “eddie” and “edward” would show up as search results, so the answer is 3. For “find edw”, only “edward” and “edwina” would show up, so it is 2. For “find a”, nothing begins with the letter “a”, so the answer is 0.