Validating and Parsing Email Addresses



A valid email address meets the following criteria:

- It's composed of a *username*, *domain* name, and *extension* assembled in this format: username@domain.extension
- The *username* starts with an *English alphabetical character*, and any subsequent characters consist of one or more of the following: alphanumeric characters, , . , and .
- The domain and extension contain only English alphabetical characters.
- The *extension* is **1**, **2**, or **3** characters in length.

Given n pairs of names and email addresses as input, print each name and email address pair having a *valid* email address on a new line.

Hint: Try using Email.utils() to complete this challenge. For example, this code:

```
import email.utils
print email.utils.parseaddr('DOSHI < DOSHI@hackerrank.com>')
print email.utils.formataddr(('DOSHI', 'DOSHI@hackerrank.com'))
```

produces this output:

('DOSHI', 'DOSHI@hackerrank.com') DOSHI <DOSHI@hackerrank.com>

Input Format

The first line contains a single integer, n, denoting the number of email address.

Each line i of the n subsequent lines contains a *name* and an *email address* as two space-separated values following this format:

name <user@email.com>

Constraints

• 0 < n < 100

Output Format

Print the space-separated name and email address pairs containing *valid* email addresses only. Each pair must be printed on a new line in the following format:

name <user@email.com>

You must print each valid email address in the same order as it was received as input.

Sample Input

2 DEXTER <dexter@hotmail.com> VIRUS <virus!@variable.:p>

Sample Output

DEXTER <dexter@hotmail.com>

Explanation

dexter@hotmail.com is a valid email address, so we print the name and email address pair received as input on a new line.

virus!@variable.:p is not a valid email address because the username contains an exclamation point (!) and the extension contains a colon (:). As this email is not valid, we print nothing.