

Saying Hi

Given a sentence, s , write a RegEx to match the following criteria:

1. The first character must be the letter H or h .
2. The second character must be the letter I or i .
3. The third character must be a single space (i.e.: $\backslash s$).
4. The fourth character *must not* be the letter D or d .

Given n lines of sentences as input, print each sentence matching your RegEx on a new line.

Input Format

The first line contains an integer, n , denoting the number of lines of sentences.
Each of the n subsequent lines contains some sentence s you must match.

Constraints

- $1 \leq n \leq 10$
- Each sentence, s , contains 1 to 10 words.
- Each word/token in a sentence is comprised only of upper and lowercase English letters.

Output Format

Find each sentence, s , satisfying the RegEx criteria mentioned above, and print it on a new line.

Sample Input

```
5
Hi Alex how are you doing
hI dave how are you doing
Good by Alex
hidden agenda
Alex greeted Martha by saying Hi Martha
```

Sample Output

```
Hi Alex how are you doing
```

Explanation

The first sentence satisfies the RegEx criteria set forth in the Problem Statement (starts with the case-insensitive word Hi , followed by a space, followed by a letter that is *not* d), so we print the sentence on a new line.

The second sentence fails our RegEx criteria, as the second word/token starts with a d (so we print nothing).

The third sentence fails our RegEx criteria, as it doesn't start with an h (so we print nothing).

The fourth sentence fails our RegEx criteria, as the third character in the sentence is not a space (so we print nothing).

The fifth sentence fails as our RegEx criteria, as the sentence *does not start* with the word ***Hi*** (so we print nothing).