import java.io.\*;

import java.util.\*;

import java.util.regex.\*;

public class WordCount {

public static void main(String[] args) {

// Input sentence

Scanner scanner = new Scanner(System.in);

System.out.print("Type a sentence: ");

String sentence = scanner.nextLine();

scanner.close();

// Find all words using regex

Pattern pattern = Pattern.compile("\\b\\w+\\b");

Matcher matcher = pattern.matcher(sentence.toLowerCase());

// Count occurrences of each word

Map<String, Integer> wordCount = new HashMap<>();

while (matcher.find()) {

String word = matcher.group();

wordCount.put(word, wordCount.getOrDefault(word, 0) + 1);

}

// Sort the words alphabetically

List<String> sortedWords = new ArrayList<>(wordCount.keySet());

Collections.sort(sortedWords);

// Display the word count in alphabetical order

for (String word : sortedWords) {

System.out.println(word + " : " + wordCount.get(word));

}

}

}