

# Sound of Anagrams

## Problem ID: a14p02anagrams

The underground rap scene at Reykjavik University is brutal, only the best survive. However, good music is not enough, you must also have a banger title. Nowadays, anagrams are in style, so Diddi from the law department wants your help to create a program that can determine if two sentences are anagrams.

A word is an anagram of another word if the characters in one of the words can be rearranged to form the other word. We can extend this definition to sentences if we allow spaces between words, and ignore punctuation.

Write a program that accepts as input 2 sentences. The program should then convert the input strings into a dictionary, where the key is a letter in the sentence, and the value is the count of the character in the sentence. Do not add punctuation or spaces into the dictionary (HINT: `import string.punctuation`).

The program should report whether the two sentences are anagrams of each other.

Note: The sentences should be compared in a case-insensitive manner, so the program should not differentiate between upper case and lower case letters.

### Input

The input will consist of 2 lines, containing one sentence each,  $S_1$  and  $S_2$ . In the tests, the length of each  $S_i$  will be restricted to  $|S_i| \leq 70$ .

### Output

The output should consist of one line. If  $S_1$  is an anagram of  $S_2$ , the program should print out:

- $\{S_1\}$  is an anagram of  $\{S_2\}$ .

Otherwise, the program should print out:

- $\{S_1\}$  is not an anagram of  $\{S_2\}$ .

#### Sample Input 1

A gentleman Elegant man	A gentleman is an anagram of Elegant man.
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#### Sample Output 1

#### Sample Input 2

panama pan man	panama is not an anagram of pan man.
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#### Sample Output 2

#### Sample Input 3

Eleven plus two Twelve plus one	Eleven plus two is an anagram of Twelve plus one.
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#### Sample Output 3

#### Sample Input 4

dormitory dirty room	dormitory is an anagram of dirty room.
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#### Sample Output 4

#### Sample Input 5

Astronomer Moon starrer	Astronomer is an anagram of Moon starrer.
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#### Sample Output 5

#### Sample Input 6

Tom Marvolo Riddle I am Lord You Know Who
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**Sample Output 6**

Tom Marvolo Riddle is not an anagram of I am Lord You Know Who.