
Palindromania

Input file: **standard input**
Output file: **standard output**
Time limit: **2 seconds**
Memory limit: **64 megabytes**

Palindromes are fun! We love palindromes! Unfortunately, sometimes words pretend to be palindromes, but they're not, and we don't like that. Help check whether a given line of text is a palindrome.

A palindrome is a sentence that reads the same both forward and backward, ignoring whitespace.

Input

A single line of text containing no more than 1 000 000 characters. All characters in the input consist of either lowercase letters ('a', 'b', ..., 'z') or a space character ' '

Output

If the line of text is a palindrome, output **palindrome**. If not, output **not a palindrome**.

Scoring

A total of 25 input cases are given. 4 points are awarded for each test case correctly solved.

Examples

standard input	standard output
racecar	palindrome
bernays	not a palindrome
madam im adam	palindrome

Note

This is an output only problem. That is, you will not submit any code, only answers. The input files are on the submission system, available as an attachment.

For each input file **input_*.txt**, you must submit a corresponding output file **output_*.txt**. You may submit these files individually on the submission server, or you can zip any subset of the files and submit the zipped folder to the server.