

Intermediate Division**STRINGS AND THINGS**

PROBLEM: Given a string of characters, answer some questions about the string.

INPUT: A string of characters. All the letters will be upper case. The characters may not be read in one at a time or one word at a time.

OUTPUT:

1. How many words are in the string.
2. Print all the words in reverse order, ie STOP becomes POTS.
3. Write the words in alphabetical order. Each word is printed just once.
4. Print the letters used in alphabetical order. Each letter is printed just once.
5. Print the words in the string in reverse order, ie I SEE HIM becomes HIM SEE I

SAMPLE INPUT

IN A RIGHT TRIANGLE THE SQUARE OF THE HYPOTENUSE EQUALS THE SUM OF THE SQUARES OF THE LEGS

SAMPLE OUTPUT

1. 18
2. NI A THGIR ELGNAIRT EHT ERAUQS FO EHT ESUNETOPYH SLAUQE EHT MUS FO EHT SERAUQS FO EHT SGEL
3. A EQUALS HYPOTENUSE IN LEGS OF RIGHT SQUARE SQUARES SUM THE TRIANGLE
4. AEFHILMNOPQRSTUY
5. LEGS THE OF SQUARES THE OF SUM THE EQUALS HYPOTENUSE THE OF SQUARE THE TRIANGLE RIGHT A IN