
12. Words with Friends

Program Name: Words.java

Input File: words.dat

The Facebook app, Words with Friends, takes the user's name as it is seen on Facebook and shortens it. In Facebook, a person's name reads first name, all middle names and last name with all names separated by a space. In Words with Friends, the first name is followed by the first initial of all of the middle and last names, all separated by a single space. For example, Walter Alpheus Porter in Facebook would become Walter A P in Words with Friends.

You are to write a program that will change a person's Facebook name to his Words with Friends name.

Input

The first line of input will contain a single integer n that indicates the number of names to follow. Each of the following n lines will contain a person's complete Facebook name. All names will contain only spaces and alphabetic characters.

Output

For each of the names input, you will print the person's Words with Friends name on a line by itself.

Example Input File

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Richard S Jones

James Robin West

Alexander James Wilson

Mary Alice Jones Williams

Example Output to Screen

Richard S J

James R W

Alexander J W

Mary A J W

Note: Extra spaces at the end of each line of output are ok.