D4. The Beaver's Problem - 3

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input

output: standard output

The Smart Beaver from ABBYY came up with another splendid problem for the ABBYY Cup participants! This time the Beaver invites the contest participants to check out a problem on sorting documents by their subjects. Let's describe the problem:

You've got some training set of documents. For each document you know its subject. The subject in this problem is an integer from 1 to 3. Each of these numbers has a physical meaning. For instance, all documents with subject 3 are about trade.

You can download the training set of documents at the following link: http://download4.abbyy.com/a2/X2RZ2ZWXBG5VYWAL61H76ZQM/train.zip. The archive contains three directories with names "1", "2", "3". Directory named "1" contains documents on the 1-st subject, directory "2" contains documents on the 2-nd subject, and directory "3" contains documents on the 3-rd subject. Each document corresponds to exactly one file from some directory.

All documents have the following format: the first line contains the document identifier, the second line contains the name of the document, all subsequent lines contain the text of the document. The document identifier is used to make installing the problem more convenient and has no useful information for the participants.

You need to write a program that should indicate the subject for a given document. It is guaranteed that all documents given as input to your program correspond to one of the three subjects of the training set.

Input

The first line contains integer id ($0 \le id \le 10^6$) — the document identifier. The second line contains the name of the document. The third and the subsequent lines contain the text of the document. It is guaranteed that the size of any given document will not exceed 10 kilobytes.

The tests for this problem are divided into 10 groups. Documents of groups 1 and 2 are taken from the training set, but their identifiers will not match the identifiers specified in the training set. Groups from the 3-rd to the 10-th are roughly sorted by the author in ascending order of difficulty (these groups contain documents which aren't present in the training set).

Output

Print an integer from 1 to 3, inclusive — the number of the subject the given document corresponds to.

Examples