

Longest Substring

Write a program to find the longest repeating substring of a given arbitrarily long character string. For example, in the string

```
The 123 computers used in this competition to perform matrix
computations are supplied by Commercial Computer Corporation.
```

the repeating substrings include "co", "com", "comp", and "comput". (There are also many trivial substrings consisting of one letter.) The longest repeating substring is "comput". Note that the comparisons are not case sensitive --- "Commercial" and "Computer" are included in these repeating substrings. Only upper and lower case letters are considered to be parts of substrings; blanks and punctuation symbols are ignored.

The input file consists of a string which may extend over more than one line. It ends with a blank line.

The output file consists of a single word: the longest repeating substring in the input.

Test Data

First:

```
The 123 computers used in this competition to perform matrix
computation are supplied by XYZ computer corporation
```

Expected output:

```
computer
```

Second:

```
The 123 computers used in this competition to perform matrix
computation are supplied by commercial computers corp.
```

Expected output:

```
computers
```

Third:

```
a abcd d def abcd def abc gh abcd swa abc def abcd ss
```

Expected output:

```
abcd
```