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CTU Open Contest 2012

Software Bugs

`bugs.c`, `bugs.cpp`, `Bugs.java`

Not all bugs are insects. There are also certain kinds of bugs that may become a real nightmare for software developers. You definitely know the situation when a user calls to say “Hey, I’ve found a bug in your program.” Once you have located and removed the bug, another one appears immediately. It is a hard and never-ending process.

Recently, there appeared a promising open-source initiative called the *Bug Preprocessor*. The preprocessor is a program able to find all bugs in your source code and mark them, so they are relatively easy to remove. Your task is to write a program that will remove all marked bugs from the preprocessed source code.

Input Specification

The input contains several test cases. Each test case starts with a line containing one integer number T ($0 \leq T \leq 100\,000$), one space and a string B used by the preprocessor to mark all bugs. The next T lines then contain the preprocessed source code. All bugs are represented by a case-sensitive string B.

Each line of the input will be between 0 and 2 000 000 characters long. The bug marker B consists of at least 1 and at most 1000 uppercase letters (“`A`” through “`Z`”).

Output Specification

Your program must remove all of the bugs and produce the same result as if the first occurrence of B on each line was removed repeatedly, until there is no other existing occurrence of B. Nothing else may be removed, not even spaces.

Sample Input

```
7 BUG
print "No bugs here..."

void hello() {
BUGBUG
  printfBUG("Hello, world!\n");
}

1 ERR
wriERRERRtelERRn("Hello E-R-R");
```

Output for Sample Input

```
print "No bugs here..."

void hello() {

  printf("Hello, world!\n");
}

writeln("Hello E-R-R");
```

(This problem has been adapted from SWERC archives.)