Problem D - Captcha Gunna Get Ya!

This is an interactive problem. See output specifications for details.

You are part of an organization of 5up3rl33t hackers and you've just received your latest mission: you must solve the difficult problem of decoding captchas from a particular target company your organization is interested in. The organization wants to access the company by brute forcing a set of known default usernames and passwords, but is currently deterred by a captcha that must be correctly typed in before logging in.

Through the hard work of your fellow hackers, you know that each captcha used by the company is a 10 "digit" number represented by a 5×50 array of characters, where each number occupies a 5×5 array. Furthermore, you know some of the digits used by the captchas (see Figures 1 and 2 for a sample captcha and the corresponding arrays).

```
.*.*. ***.. **... ***** ***.. *****
..... ***.. **... *...* ..... *.*.*
.*.*. ***.. ..... ***** ***.. *****
..... ..... ...** ..... ..... *.*.*
..... ..... ...** ..... ***.. *****
  0     1     2     3     4     5
```

Figure 1: The possible digits of a captcha (missing 7th digit not shown).

```
.*.*.***...*.*.***...*.*.***...*.*.***...*.*.***..
.....***.......***.......***.......***.......***..
.*.*.***...*.*.***...*.*.***...*.*.***...*.*.***..
..................................................
..................................................
```

Figure 2: The captcha representation of the number 0101010101.

From the work of your colleagues, you've figured out that the company captchas contain 7 types of digits and has 4000 captchas in total. This means that there is exactly one missing digit that your fellow hackers have not obtained!
Your job is to build a program that is presented with captchas uniformly drawn from the company's database (while the time limit is not up) and answers at least 4242 of them correct!

Scoring system How do you do this without the missing digit? If you answer an captcha incorrectly, the judge will output the correct 10 digit number represented by the captcha. In reality, this corresponds to you decoding the captcha manually, which will cost you 100 penalty points on the judging server. On the other hand, each correct answer will only cost you 1 penalty point on the judging server. If you exceed 424242 penalty points, you will be given a Wrong Answer verdict.

Input Specification:

While you have not answered 4242 captchas correctly, the judge will give you a 5×50 character array which represents the 10 digit captcha. To each query you must answer a 10 digit response representing the number within the captcha.
If you are wrong, the judge will output the correct 10 digit number represented by the captcha. If you are right, the judge will output "CORRECT!".
Once 4242 captchas are correctly answered, you must terminate your program with a zero exit code.

Output Specification:

Each query must be answered by a 10 digit number. Your program must flush the output after printing it. In C++, this means using `std::endl`, in Java `System.out.flush()`, in Python `sys.stdout.flush()`, and in C this means using `fflussh(stdout)`.

Sample Input:

```
.*.*.***...*.*.***...*.*.***...*.*.***...*.*.***..
.....***.......***.......***.......***.......***..
.*.*.***...*.*.***...*.*.***...*.*.***...*.*.***..
..................................................
..................................................
CORRECT!
.*.*.***...*.*.***...*.*.***...*.*.***...*.*.**...
.....***.......***.......***.......***.......**...
.*.*.***...*.*.***...*.*.***...*.*.***...*.*......
..................................................**
..................................................**
0101010102
...
```

Sample Output:

```
0101010101
0101010101
...
```