Multiple of 17

Theorem: If you drop the last digit d of an integer n ($n \geq 10$), subtract 5d from the remaining integer, then the difference is a multiple of 17 if and only if n is a multiple of 17.

For example, 34 is a multiple of 17, because 3-20=-17 is a multiple of 17; 201 is not a multiple of 17, because 20-5=15 is not a multiple of 17.

Given a positive integer n, your task is to determine whether it is a multiple of 17.

Input

There will be at most 10 test cases, each containing a single line with an integer n ($1 \leq n \leq 10^{100}$). The input terminates with n = 0, which should not be processed.

Output

For each case, print 1 if the corresponding integer is a multiple of 17, print 0 otherwise.

Sample Input

```
34
201
2098765413
17171717171717171717171717171717171717171717171718
0
```

Sample Output

```
1
0
1
0
```

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