11879 Multiple of 17

Theorem: If you drop the last digit d of an integer $n \ (n \ge 10)$, 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 $(1 \le n \le 10^{100})$. 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

Sample Output

- 1
- 0
- 1
- 0