

11879 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

[illegible]

Sample Output

$$\begin{matrix} 1 \\ 0 \\ 1 \\ 0 \end{matrix}$$