Problem A. Simple Recursion

Input file:	`standard input`
Output file:	`standard output`
Time limit:	2 seconds
Memory limit:	64 megabytes

Technically, a recursive function is a function that makes a call to itself. To prevent infinite recursion, you need an if-else statement (of some sort) where one branch makes a recursive call, and the other branch does not. The branch without a recursive call is usually the base case (base cases do not make recursive calls to the function). Your task is to output the evaluation of the following function :

IF $N \geq 10$, then $f(N) = f(f(N - 11))$.

IF $N \leq 9$, then $f(N) = N$.

Write a program that computes $f(N)$.

Input

Each line represent a test case represented by a single integer n where $1 \leq N \leq 10^6$. The end of input is indicated by a value 0 which should not be processed. The number of test case could be as large as $250,000$ test cases.

Output

The program shall computes the value of f(N) and print it in the following format: f(N) = y where y is the computed value of f(N) .

Example

standard input	standard output
156 1007 0	f(156) = 2 f(1007) = 6