You are given a string of synchronized blinking lights with $N$ bulbs. This string of lights is interesting in that instead of blinking on and off in unison, they follow a very specific pattern. Assume that at time $t = 0$ all bulbs are off. At each subsequent (integral) time $t$, bulbs toggle from on to off or off to on depending on their current configuration. When a bulb will toggle on or off depends on its position from the beginning of the string. If its position is a multiple of time $t$, it will toggle. So at time $t = 1$ all bulbs will toggle on (1, 2, 3, 4, etc.). At time $t = 2$ only even numbered bulbs (2, 4, 6, 8, etc.) will toggle again. At time $t = 3$ every third bulb (3, 6, 9, 12, etc.) toggles. This continues up to time $t = N$, at which point all bulbs are reset to off and the blinking pattern restarts at time $t = N + 1$. (Thus time $t = N + 1$ is viewed as equivalent to time $t = 1$: all bulbs are toggled on.)

Quality Control is having a hard time verifying that the bulbs are turning on and off at the appropriate times. Your team has been asked to write a verification program that can be given the number of bulbs $N$ on the strand, a particular time $t$, and bulb position $b$, then determines if that bulb is on or off at time $t + \epsilon$. In other words, if the bulb is on at time $t + \epsilon$, then the bulb either toggled on at time $t$ or was already on at time $t$.

The following limits hold for $n$, $t$, and $b$:

$3 \leq N < 2^{54}$
$1 \leq t, b < 2^{54}$
$b \leq N$

[The judges largest test case involves 17-digit numbers that start 123, so they are indeed $< 2^{54}$.]

**Input**

Input to your program will be multiple lines each containing the number of bulbs, $N$, the time since they were turned on, $t$, and the bulb number we are interested in, $b$, separated by spaces. Read until at end of file, there is no end of data indicator.

**Output**

Indicate if the specified bulb is on or off at the end of the requested time. Follow this format exactly: ‘Case’, a space, the case number, a colon and one space, and the answer which is either ‘On’ or ‘Off’. Do not print any trailing spaces.

**Sample Input**

55 10 24
55 68 24
20 70 5

**Sample Output**

Case 1: Off
Case 2: On
Case 3: Off