Problem C: Sums

Given an integer N, express it as the sum of at least two consecutive positive integers. For example:

- $10 = 1 + 2 + 3 + 4$

- $24 = 7 + 8 + 9$

If there are multiple solutions, output the one with the smallest possible number of summands.

Input

The first line of input contains the number of test cases T. The descriptions of the test cases follow:

Each test case consists of one line containing an integer N ($1 \leqslant N \leqslant 10^9$).

Output

For each test case, output a single line containing the equation in the format:

`N = a + (a+1) + ... + b`

as in the example. If there is no solution, output a single word `IMPOSSIBLE` instead.

Example

For an example input	the correct answer is:
3 8 10 24	IMPOSSIBLE 10 = 1 + 2 + 3 + 4 24 = 7 + 8 + 9