

Problem X1*: 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 ($1 \leq N \leq 10^9$).

Output

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

$N = a + (a+1) + \dots + b$

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

Example

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