Problem B

Cubes

Input: Standard InputOutput: Standard Output

Given a positive integer N you will have to find two positive integers x and y such that:

$$N = x^3 - y^3$$

Input

The input file contains at most 100 lines of inputs. Each line contains a positive integer N $(0 < N \le 10000)$. Input is terminated by a line containing a single zero. This line should not be processed.

Output

For each line of input produce one or more lines of output. Each of these lines contains two positive integers x, y separated by a single space, such that $x = x^2 - y^2$. If there is no such integer values of x and y then produce the line "No solution" instead. If there is more than one solution then output the one with smallest value of y.

Sample Input Output for Sample Input

7		2 1		
37		4 3		
12		No	solution	
0				

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