Problem B

Cubes

Input: Standard Input
Output: 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 10o lines of inputs. Each line contains a positive integer N ($0<N\leq10000$). 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 $N = x^3 - y^3$. 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 37 12 0	2 1 4 3 No solution

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