

ICPC Assiut University Community

Newcomers Training ,Do Your Best

Ahmed Essam Yassin | [Logout](#)

HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

H. Simple Mod

time limit per test: 1 second

memory limit per test: 256 megabytes

input: standard input

output: standard output

Hady has a positive number N and a simple equation:

$$(X^2 + Y^2) \text{ MOD } N = 0$$

Your task is to find any values for X, Y that satisfy the equation, such that X and Y are non-negative integers.

Input

Only one integer N ($1 \leq N \leq 10^{100}$).

Output

If you can find any two non-negative integers such that $(X, Y \leq 10^9)$, print them. Otherwise, print "No solutions".

Examples

input	Copy
5	
output	Copy
4 3	
input	Copy
100000100	
output	Copy
10 1000	
input	Copy
50	
output	Copy
5 5	

Assiut University Training - Newcomers

Public

Participant



→ About Group



ICPC Assiut
community

[Group website](#)

→ Group Contests

- Sheet #10 (General Hard)
- Sheet #9 (General medium)
- Sheet #8 (General easy)
- Sheet #7 (Recursion)
- Sheet #6 (Math - Geometry)
- Sheet #5 (Functions)
- Sheet #4 (Strings)
- Contest #3.1
- Sheet #3 (Arrays)
- Contest #2
- Sheet #2 (Loops)
- Contest #1
- Sheet #1 (Data type - Conditions)

Contest #2

Finished