



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🖫 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

C. Table Decorations

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

You have r red, g green and b blue balloons. To decorate a single table for the banquet you need exactly three balloons. Three balloons attached to some table shouldn't have the same color. What maximum number t of tables can be decorated if we know number of balloons of each color?

Your task is to write a program that for given values r, g and b will find the maximum number t of tables, that can be decorated in the required manner.

Input

The single line contains three integers r, g and b ($0 \le r$, g, $b \le 2 \cdot 10^9$) — the number of red, green and blue baloons respectively. The numbers are separated by exactly one space.

Output

Print a single integer t — the maximum number of tables that can be decorated in the required manner.

Examples

input	
543	
output	
4	
input	
111	
output	
1	

input 233		
233		
output		
2		

Note

In the first sample you can decorate the tables with the following balloon sets: "rgg", "gbb", "brr", "rrg", where "r", "g" and "b" represent the red, green and blue balls, respectively.

Codeforces Round #273 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags				
greedy	No tag edit access			

→ Contest materials

Announcement