

THE ACM-ICPC 2016

VIETNAM SOUTHERN PROGRAMMING CONTEST Host: University of Science, VNU-HCM

October 9, 2016



Problem E Veggie Time Limit: 1 second

Veggie is important for good health. However, we need to use a special eco-friendly type of bags that can preserve the freshness of veggie without any chemical preservation.

Ann always buys many bags of veggie when she goes shopping. There are three types of veggie bags, containing 1kg, 2kg, and 3kg of mixed veggie. Every day, to prepare meals for her big family, she needs 1kg of veggie for breakfast, 3kg of veggie for lunch, and 2kg of veggie for dinner.



When Ann opens a veggie bag, if she does not use all the veggie in that bag, she needs to put the remain veggie in a *single* new special eco-friendly bag to keep veggie fresh.

Ann buys *m* veggie bags of 1kg, *n* veggie bags of 2kg, and *k* veggie bags of 3kg. Please help her to determine how many days she can cook meals (including breakfast, lunch, and dinner) and the minimum number of special eco-friendly bags that she needs to keep veggie fresh.

Input

The first line of input contains three integers: m, n, and k – the number of bags containing 1kg, 2kg, and 3kg of veggie respectively $(0 \le m, n, k < 10^6)$. Two consecutive numbers are separated by a single space.

Output

Display a line with two integers: the number of days Ann can cook 3 meals per day (including breakfast, lunch, and dinner) and the minimum number of special eco-friendly bags she uses.

Sample Input

Sample Output

1 2 3	2 1