1534. Football in Gondor

Time limit: 1.0 second Memory limit: 64 MB

Gondor Football Championship is in full swing. Unfortunately, Gandalf missed the beginning of the championship (he had to visit the Mines of Moria because a sleeping dragon was found there). Upon his return, he learned from the omnipresent hobbits that his favorite team Dinamo had already scored *K* balls and missed *L* balls. Help Gandalf to determine the maximal and minimal numbers of points that Dinamo could earn. In Gondor, if a team wins a match, it gets 3 points, for a draw it gets 1 point, and in the case of defeat the team gets 0 points.

Input

There are three integers in one line separated with a space: K, L, and N. Here K is the number of scored balls, L is the number of missed balls, and N is the number of matches that have been played by Dinamo ($0 \le K$, $L \le 10^9$, $1 \le N \le 10^9$).

Output

Output the maximal and minimal numbers of points that Dinamo could earn. The numbers must be separated with a space.

Samples

input	output
3 2 2	4 3
3 1 2	6 3
3 0 4	10 6
3 0 1	3 3

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