A. Optimal Currency Exchange

time limit per test: 1.5 seconds
memory limit per test: 512 megabytes
input: standard input
output: standard output

Andrew was very excited to participate in Olympiad of Metropolises. Days flew by quickly, and Andrew is already at the airport, ready to go home. He has n rubles left, and would like to exchange them to euro and dollar bills. Andrew can mix dollar bills and euro bills in whatever way he wants. The price of one dollar is d rubles, and one euro costs e rubles.

Recall that there exist the following dollar bills: 1, 2, 5, 10, 20, 50, 100, and the following euro bills — 5, 10, 20, 50, 100, 200 (note that, in this problem we do **not** consider the 500 euro bill, it is hard to find such bills in the currency exchange points). Andrew can buy any combination of bills, and his goal is to minimize the total number of rubles he will have after the exchange.

Help him — write a program that given integers n, e and d, finds the minimum number of rubles Andrew can get after buying dollar and euro bills.

Input

The first line of the input contains one integer n ($1 \le n \le 10^8$) — the initial sum in rubles Andrew has.

The second line of the input contains one integer d ($30 \le d \le 100$) — the price of one dollar in rubles.

The third line of the input contains integer e ($30 \le e \le 100$) — the price of one euro in rubles.

Output

Output one integer — the minimum number of rubles Andrew can have after buying dollar and euro bills optimally.

Examples

input Copy

```
100
60
70
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output Copy

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40
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input Copy

```
410
55
70
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output Copy

```
5
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input Copy

```
600
60
70
```

output Copy

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0
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Note

In the first example, we can buy just 1 dollar because there is no 1 euro bill.

In the second example, optimal exchange is to buy 5 euro and 1 dollar.

In the third example, optimal exchange is to buy 10 dollars in one bill.
