Problem I - Cersei Lannister's Debt to Iron Bank

<u>Cersei Lannister</u> is the queen of Seven Kingdoms. But four of the kingdoms are open rebellion to the crown. A big war is meant to be started very soon. And gold wins wars. She needs golds from Iron Bank. But the crown already owe The Iron Bank a huge amount of gold. She has 5 royal palanquin. But wherever she goes, she takes only one of them. Why? Because palanquin parking costs much. How parsimonious Cersei gets! Cersei is parking her palanquin at a parking lot. She can choose from the following two fee plans:

- Plan 1: The fee will be **A*****T**tk (the unit gold currency of Westeros is 'tk') when you park for **T** hours.
- Plan 2: The fee will be **B** tk, regardless of the duration.

As you know that Lannisters always pay their debts. Cersei wants to save golds and pay the debt to Iron Bank. Can you help her by finding the minimum fee when she parks for **N** hours?

Input Format

Input is given from Standard Input in the following format:

NAB

Constraints

- 1≤N≤20
- 1≤A≤100
- 1≤*B*≤2000
- All input values are integers.

Output Format

When the minimum fee is x tk, print the value of x.

Sample Input 1

7 17 120

Sample Output 1

119

Explanation 1

- If you choose Plan 1, the fee will be 7×17=119 tk.
- If you choose Plan 2, the fee will be 120 tk.

Thus, the minimum fee is 119 tk.

Sample Input 2

5 20 100

Sample Output 2

100

Explanation 2

The fee might be the same in the two plans.