Calculation

Given 3 integer values M, N and P solve the following ecuation:

If M is less than N solve $R = M^*N + P$. On the contrary solve R = (M+N) * P.

Input

Three integer numbers M, N and P, in that order. [-100 <= M, N, P <= 100]

Output

R, the result of the ecuation.

Example

Input:

10 20 30

Output:

230