Problem F
Binary Transformations

Input File: F.in
Output File: standard output
Time Limit: *1* second (C/C++)
Memory Limit: *256* megabytes

There are **n** bits. Each bit **i** has a value $\mathbf{a_i}$ (0 or 1) and an associated cost $\mathbf{c_i}$. We can change the value of bit **i** with a cost computed as the sum of all the costs $\mathbf{c_j}$ of the bits **j** such that $\mathbf{a_j}$ **= 1 AFTER** bit **i** is changed. What is the minimum amount that should be paid to set each bit **i** to a specified value $\mathbf{b_i}$.

Input
The first line contains the integer **n** ($1 \le \mathbf{n} \le 5 \times 10^3$) - the number of bits
The second line contains *n* integers $\mathbf{c_i}$ ($1 \le \mathbf{c_i} \le 10^9$) - the costs associated with the bits
The third line contains the original **n** values of the bits $\mathbf{a_i}$ - the original values of the bits
The fourth line contains the required **n** values of the bits $\mathbf{b_i}$ - the required values of the bits

Output
Print one number - the minimum cost.

Sample input	Sample output
5 5 2 6 1 5 01110 10011	21