# C. Marina and Vasya

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Marina loves strings of the same length and Vasya loves when there is a third string, different from them in exactly $t$ characters. Help Vasya find at least one such string.

More formally, you are given two strings $s_1$, $s_2$ of length $n$ and number $t$. Let's denote as $f(a, b)$ the number of characters in which strings $a$ and $b$ are different. Then your task will be to find any string $s_3$ of length $n$, such that $f(s_1, s_3) = f(s_2, s_3) = t$. If there is no such string, print $-1$.

## Input

The first line contains two integers $n$ and $t$ ($1 \le n \le 10^5$, $0 \le t \le n$).

The second line contains string $s_1$ of length $n$, consisting of lowercase English letters.

The third line contain string $s_2$ of length $n$, consisting of lowercase English letters.

## Output

Print a string of length $n$, differing from string $s_1$ and from $s_2$ in exactly $t$ characters. Your string should consist only from lowercase English letters. If such string doesn't exist, print -1.

### Examples

| input |
| --- |
| 3 2<br>abc<br>xyc |
| **output** |
| ayd |

| input |
| --- |
| 1 0<br>c<br>b |
| **output** |
| -1 |