The 27th Annual ACM International Collegiate Programming Contest ASIA Regional - Taejon



Practice Problem B

Reverse Input: reverse.in

For a string s of English letters, a set of reversing operations is given as a sequence of pairs of integers. Each pair of integers (i, j) indicates the locations of two letters in s and the substring between the two letters at i and j inclusive should be reversed. The location of the first character of s is assumed to be 1.

For example, suppose that a string s is "iloveyou" and a set of reversing operations is $\{(2, 5)\}$. Then, the string after applying the reverse operation is "ievolyou".

Write a program that performs all the reversing operations and outputs the resulted string.

Input

The input consists of T test cases. The number of test cases (T) is given in the first line of input file. Each test case consists of four lines. The first line has an integer n, $1 \le n \le 100$, that represents the length of string s. The second line contains the string s. The third line contains an integer m, $1 \le m \le 100$, that represents the number of reversing operations. The fourth line contains a sequence of m pairs of integers, $i_1, j_1, i_2, j_2, \ldots, i_m, j_m$ ($1 \le i_k, j_k \le n$).

Output

Print exactly one line for each test case. The line should contain a string after applying all the reversing operations.

Sample Input (reverse.in)

Output for the Sample Input

(1010100111)	
4	iloveyou
8	iloveyou
ievolyou	iloveyou
1	iloveyou
2 5	
8	
ieovlyou	
2	
2 5 3 4	
8	
ievolyou	
1	
5 2	
8	
ievolyou	
2	
5 2 3 3	