

## B. Lucky Transformation

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Petya loves lucky numbers. Everybody knows that lucky numbers are positive integers whose decimal representation contains only the lucky digits **4** and **7**. For example, numbers **47**, **744**, **4** are lucky and **5**, **17**, **467** are not.

Petya has a number consisting of  $n$  digits without leading zeroes. He represented it as an array of digits without leading zeroes. Let's call it  $d$ . The numeration starts with 1, starting from the most significant digit. Petya wants to perform the following operation  $k$  times: find the minimum  $x$  ( $1 \leq x < n$ ) such that  $d_x = 4$  and  $d_{x+1} = 7$ , if  $x$  is odd, then to assign  $d_x = d_{x+1} = 4$ , otherwise to assign  $d_x = d_{x+1} = 7$ . Note that if no  $x$  was found, then the operation counts as completed and the array doesn't change at all.

You are given the initial number as an array of digits and the number  $k$ . Help Petya find the result of completing  $k$  operations.

### Input

The first line contains two integers  $n$  and  $k$  ( $1 \leq n \leq 10^5$ ,  $0 \leq k \leq 10^9$ ) — the number of digits in the number and the number of completed operations. The second line contains  $n$  digits without spaces representing the array of digits  $d$ , starting with  $d_1$ . It is guaranteed that the first digit of the number does not equal zero.

### Output

In the single line print the result without spaces — the number after the  $k$  operations are fulfilled.

### Examples

<b>input</b>
7 4 4727447
<b>output</b>
4427477

  

<b>input</b>
4 2 4478
<b>output</b>
4478

### Note

In the first sample the number changes in the following sequence:  
4727447  $\rightarrow$  4427447  $\rightarrow$  4427477  $\rightarrow$  4427447  $\rightarrow$  4427477.

In the second sample: 4478  $\rightarrow$  4778  $\rightarrow$  4478.